

All pricing is 30% off list

L3Harris-Tait Products & Services Catalog

Company Proprietary and Confidential
All prices and products are subject to change without notice.

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CUSTOMER SERVICE AND ORDERING INFORMATION

CUSTOMER AND FINANCIAL SERVICES

This catalog contains pricing and ordering information on standard two-way mobile radio equipment, control devices, and accessories manufactured by L3Harris Technologies and complementary equipment supplied by other manufacturers.

Updates, such as product additions or price changes, will be made promptly to the catalog information that appears on our website. The address for the website appears below. This catalog will be issued periodically.

The following sections are included for ease of ordering:

- **Code Numbers for Radio Services** – Applicable code must be stated on all orders. Codes represent the customer classification of radio equipment users.
- **Hazardous Atmosphere Categories** – Selected portable radios with appropriate factory installed options are certified as **Intrinsically Safe** for use in Division 1, Class I hazardous locations in the presence of Gas Groups C and D atmospheres, Class II hazardous locations in the presence of Gas Groups E, F, and G atmospheres, Class III hazardous locations, and as **Nonincendive** for use in Division 2, Class I hazardous locations in the presence of Gas Groups A, B, C, and D. Typical certification information is shown herein. See product data sheets for actual product specifications.
- **Customer Contact Information and Financial Services** – Web addresses, contacts and telephone numbers, standard payment terms and financing plans, order acceptance and documentation, sales to leasing companies, customer credit application, and Uniform Commercial Code (UCC-1) Financing Statement.
- **Warranty** – Copies of L3Harris warranties are located at the website <https://www.harris.com/solution/pspc-customer-service>.

All prices and products are subject to change without notice. All prices shown are US Dollars. Shipping and handling charges are to be paid or billed to the customer. The Purchaser is responsible for the payment of excise, sales, use, and similar taxes that may be applicable.

All orders are subject to acceptance at the L3Harris facilities in Lynchburg, Virginia. Orders must be sent electronically, faxed, or submitted on an L3Harris order form and will be subject to the standard terms and conditions.

CODE NUMBERS FOR RADIO SERVICES (FOR APPLICATION IN THE U.S.A. ONLY)

On all orders, insert applicable code number in the CLASS OF SERVICE box at the bottom of the order form. Codes represent the customer classification of radio equipment users.

BUSINESS & INDUSTRIAL

EOO - SPECIAL EMERGENCY (90)
E15 - Ambulance (Privately Owned)
E20 - Doctor
E30 - Veterinarian
E45 - School Bus (Privately Owned)
E55 - Hospital (Privately Owned)
GOO - PETROLEUM (90)
G10 - Pipeline
G20 - Refining
G30 - Producing
G40 - Drilling
G50 - Exploration
G90 - Other
HOO - FOREST PROD. (90)
IOO - SPECIAL INDUSTRIAL (90)
I10 - Agriculture
I20 - Shaft Mining
I21 - Strip Mining
I30 - Heavy Construction (Bridges, Roads, etc.)
I31 - Special Trade Contractor
I32 - Water Well Drilling
I33 - Water, Oil, Gas, or Power Product Systems
I40 - Newspaper Periodicals (Relay Press)
I50 - Concrete Asphalt Delivering
I51 - Fuel Oil/LP Gas Deliveries
I60 - Oil Field Maintenance & Service
I90 - Other
JOO - BUSINESS (90)
J10 - Building Contractor
J11 - Heavy Construction
J12 - Excavating and Grading
J13 - Electrical Contractor
J20 - Wholesale Commercial Product Dealers
J21 - Commercial & Industrial Machinery, Equipment & Supplies
J30 - Retail Consumer Products
J31 - TV and Appliance Dealers
J32 - Heating, Plumbing, Air Conditioning Equipment Dealers
J33 - Fuel Oil/LP Gas Dealers
J34 - Building Material Dealers
J35 - Automobile Dealers
J36 - Gasoline Service Stations
J37 - Auto Tire, Battery & Accessory Parts Dealers

BUSINESS & INDUSTRIAL

J38 - Electronic Sales & Service (Not included in J31)
J39 - Real Estate
J40 - Retail Services
J41 - Laundry & Dry Cleaning
J42 - Exterminators
J43 - Automobile Repair
J44 - Detective Agencies
J45 - Septic Tank & Sewer Service
J46 - Credit Agencies
J47 - Insurance Agencies
J50 - Commercial Products Sales & Service
J51 - Vending Machines
J52 - Paper and Pulp
J53 - Two-Way Radio
J60 - Agriculture
J70 - Manufacturing
J90 - Other
KOO - MANUFACTURERS (90)
K10 - Chemicals
K20 - Primary Metals
K21 - Metal Working
K30 - Textiles
K40 - Machinery
K90 - Other
LOO - LOW POWER INDUSTRIAL (90) (Now under Business)
NOO - MOTOR CARRIER (90)
N10 - Local & Suburban Passenger (Privately Owned)
N20 - Intercity Passenger
N30 - Local Trucking
N40 - Intercity Trucking
N90 - Other
OOO - CITIZENS (95)
O19 - Local and or Intercity Garage
O20 - Construction
O30 - Retail Sales
O40 - Service Trades
O50 - Personal Use
O90 - Other
QOO - MISC. COMMON CARRIER (90)
Q20 - RCC Affiliated with MR
Q30 - RCC End-user
Q40 - Telephone Co. End-user
YOO - AUTO EMERGENCY (90)
Y10 - Service Station or Garage
Y20 - Wrecker Service
Y30 - Automobile Club
Y90 - Other
ZOO - TAXI (90)

PUBLIC SERVICE

AOO - POLICE (90)
A10 - Municipal
A20 - County
A30 - State Agency
A90 - Other
BOO - FIRE (90)
B10 - Municipal Paid
B20 - Municipal Volunteer
B30 - County Paid
B40 - County Volunteer
B90 - Other
COO - FORESTRY CONSERVATION (90)
DOO - HIGHWAY MAINTENANCE (90)
EOO - SPECIAL EMERGENCY (90)
E10 - Ambulance Service (Publicly Owned)
E40 - School Bus (Publicly Owned)
E50 - Hospital (Publicly Owned)
E60 - Civil Defense
E70 - Search-Rescue
E90 - Other
FOO - LOCAL GOVERNMENT (90)
F10 - Municipal
F20 - State Agency
F90 - Other
IOO - SPECIAL INDUSTRIAL (90)
I70 - Telephone Maintenance
MOO - POWER (90)
M10 - Municipally Owned Utility
M20 - State Owned Utility
M30 - Cooperative Utility
M40 - Privately Owned Electric Co.
M50 - Privately Owned Gas Co.
M60 - Privately Owned Water Co.
M90 - Other
NOO - MOTOR CARRIER (90)
N60 - Mass Transit (Public)
POO - INDEPENDENT TELEPHONE (21)
Q10 - MISC. COMMON CARRIER (90) (RCC Not affiliated with MR)
SOO - TRAFFIC (90) (Include Local Government)
TOO - TRANSPORTATION (90)
T10 - Railroad
T20 - Airlines
T30 - Steamship Lines
BELL SYSTEM
100 - Western Electric/Bell IMTS.
200 - Western Electric/Bell Other

Defense				
Agency	Non-GSA		GSA	
	DOM	EXP	DOM	EXP
Air Force	W50	W52	W5G	W5E
Army	W10	W12	W1G	W1E
Navy	W20	W22	W2G	W2E
Marines	W30	W32	W3G	W3E
NSA	W40	W42	W4G	W4E
Classified Acct's	W60	W62	W6G	W6E
NASA	W70	W72	W7G	W7E
Red Cross	W80	W82	W8G	W8E
Other Defense	W90	W92	W9G	W9E

PUBLIC SERVICE (Federal Government)

Non-Defense									
Agency	Non-GSA		GSA		Agency	Non-GSA		GSA	
	DOM	EXP	DOM	EXP		DOM	EXP	DOM	EXP
U.S. Fish & Wildlife Service	V10	V12	V1G	V1E	Bureau of Alcohol, Tobacco & Firearms	370	372	37G	37E
Bureau of Land Mgt.	V20	V22	V2G	V2E	U.S. Customs Service	380	382	38G	38E
Bureau of Indian Affairs	V30	V32	V3G	V3E	U.S. Secret Service	390	392	39G	39E
Bureau of Reclamation	V40	V42	V4G	V4E	White House	410	412	41G	41E
National Park Service	V50	V52	V5G	V5E	Communications Agency				
U.S. Forest Service	V60	V62	V6G	V6E	Public Health Service	420	422	42G	42E
U.S. Coast Guard	V70	V72	V7G	V7E	I.R.S.	430	432	43G	43E
Dept. of Transportation	V80	V82	V8G	V8E	National Weather Service	440	442	44G	44E
Various Power Admin's.	V90	V92	V9G	V9E	National Oceanographic & Atmospheric Administration	450	452	45G	45E
U.S. Postal Service	310	312	31G	31E	Department of Labor	460	462	46G	46E
Veterans Administration	320	322	32G	32E	Agency for International Development	470	472	47G	47E
Drug Enforcement Admin.	330	332	33G	33E	Embassies/State Department	480	482	48G	48E
F.B.I.	340	342	34G	34E	Other Non-Defense	490	492	49G	49E
U.S. Marshalls	350	352	35G	35E					
Immigration & Naturalization Service	360	362	36G	36E					

HAZARDOUS ATMOSPHERE CATEGORIES

Typical certification information is shown herein. See product data sheets for actual product specifications. Selected portable radios with appropriate factory installed options are certified as Intrinsically Safe for use in Division 1 Class I, hazardous locations in the presence of Gas Groups C and D atmospheres, Class II hazardous locations in the presence of Gas Groups E, F, and G atmospheres, Class III hazardous locations, and as **Nonincendive** for use in Division 2, Class I hazardous locations in the presence of Gas Groups A, B, C, and D.

INTRINSICALLY SAFE

Electrical equipment that is incapable of releasing sufficient electrical or thermal energy under normal or abnormal operating conditions to cause ignition of a specific hazardous mixture and air.

NON-INCENDIVE

Electrical equipment that is incapable of releasing sufficient electrical or thermal energy under normal operating conditions only which cause ignition of a specific hazardous mixture and air.

Class I, Division 1. A Class I, Division 1 location is a location: (1) in which hazardous concentrations of flammable gases or vapors exist continuously, intermittently, or periodically under normal operating conditions; or (2) in which hazardous concentrations of such gases or vapors may exist frequently because of repair or maintenance operations or because of leakage; or (3) in which breakdown or faulty operation of equipment or processes that might release hazardous concentrations of flammable gases or vapors, and might also cause simultaneous failure of electric equipment.

Class I, Division 2. A Class I, Division 2 location is a location: (1) in which volatile flammable liquids or flammable gases are handled, processed, or used, but in which the hazardous liquids, vapors, or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in case of abnormal operation of equipment; or (2) in which hazardous concentration of gases or vapors are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operation of the ventilating equipment; or (3) that is adjacent to a Class I, Division 1 location, and to which hazardous concentrations of gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive-pressure ventilation from a source of clear air, and effective safeguards against ventilation failure are provided.

Class II, Division 1. A Class II, Division 1 location is a location: (1) in which combustible dust is or may be in suspension in the air continuously, intermittently, or periodically under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures; or (2) where mechanical failure or abnormal operation of machinery or equipment might cause such explosive or ignitable mixtures to be produced, and might also provide a source of ignition through simultaneous failure of electric equipment, operation of protection devices or from other causes; or (3) in which combustible dusts of an electrically conductive nature may be present.

Class II, Division 2. A Class II, Division 2 location is a location in which combustible dust will not normally be in suspension in the air or will not be likely to be thrown into suspension by the normal operation of equipment or apparatus in quantities sufficient to produce explosive or ignitable mixtures, but: (1) where deposits or accumulations of such combustible dust may be sufficient to interfere with the safe dissipation of heat from electric equipment or apparatus; (2) where such deposits or accumulations of combustible dust on, in, or in the vicinity of electric equipment might be ignited by arcs, sparks, or burning material from such equipment.

Class III, Divisions 1 & 2. Class III locations are those which are hazardous because of the presence of ignitable fibers or flyings. Equipment listed for installation in Class III locations is designed to exclude the fibers and flyings from the equipment enclosure and to function without developing excessive surface temperatures.

Group C Atmospheres Chemical

acetaldehyde	ethylenimine
allyl alcohol	ethyl mercaptan
n-butyraldehyde	ethyl sulfide
carbon monoxide	hydrogen cyanide
crotonaldehyde	hydrogen sulfide
cyclopropane	morpholine
diethyl ether	2-nitropropane
diethylamine	tetrahydrofuran
epichlorohydrin	unsymmetrical dimethyl
ethylene	(UDMH 1, 1-dimethyl hydrazine)

Group D Atmospheres Chemical

acetic acid (glacial)	methane (natural gas)
acetone	methanol (methyl alcohol)
acrylonitrile	3-methyl-1-butanol (isoamyl alcohol)
ammonia ¹	methyl ethyl ketone
benzene	methyl isobutyl ketone
butane	2-methyl-1-propanol (isobutyl alcohol)
1-butanol (butyl alcohol)	2-methyl-2-propanol (tertiary butyl alcohol)
2-butanol (secondary butyl alcohol)	petroleum naphtha ²
n-butyl acetate	pyridine
isobutyl acetate	octanes
di-isobutylene	pentanes
ethane	1-pentanol (amyl alcohol)
ethanol (ethyl alcohol)	propane
ethyl acetate	1-propanol (propyl alcohol)
ethyl acrylate (inhibited)	2-propanol (isopropyl alcohol)
ethylene diamine (anhydrous)	propylene
ethylene dichloride	styrene
ethylene glycol monomethyl ether	toluene
gasoline	vinyl acetate
heptanes	vinyl chloride
hexanes	xylene
isoprene	
isopropyl ether	
mesityl oxide	

¹ For classification of areas involving ammonia atmosphere, see Safety Code for Mechanical Refrigeration (ANSI/ASHRAE 15-1978) and Safety Requirements for the storage and handling of Anhydrous Ammonia (ANSI/CGA G2.1-1972).

² A saturated hydrocarbon mixture boiling in the range 20-135°C (68-275°F). Also known by the synonyms benzene, ligroin, petroleum ether, or naphtha.

Group E Atmospheres

Atmospheres containing metal dust, including aluminum, magnesium, and their commercial alloys, and other metals of similarly hazardous characteristics.

Group F Atmospheres

Atmospheres containing carbon black, charcoal or coke dusts which have more than 8 percent total volatile material (carbon black per ASTM D1620, charcoal, coal and coke dusts per ASTM D271) or atmospheres containing these dusts sensitized by other materials so that they represent an explosion hazard.

Group G Atmospheres

Atmospheres containing flour, starch, grain, or combustible plastics or chemical dusts.

Explanation of the classes, divisions and atmospheres above can be found in Article 500 of the National Electrical Code.

CUSTOMER CONTACT INFORMATION

Customer Care

UNITED STATES

1-800-368-3277 (telephone)

1-321-409-4393 (fax)

PSPC_CustomerFocus@l3harris.com (U.S. email)

FEDERAL

1-800-368-3277 (telephone)

1-321-409-4393 (fax)

PSPC_FedCustFocus@l3harris.com (Federal email)

INTERNATIONAL/CANADA

1-434-385-2804 (telephone)

1-321-409-4394 (fax)

PSPC_InternationalCustomerFocus@l3harris.com (International email)

Technical Assistance Center (TAC)

UNITED STATES/CANADA

1-800-528-7711 (telephone)

1-434-455-6712 (fax)

PSPC_TAC@l3harris.com (email)

INTERNATIONAL

1-434-385-2400 (telephone)

1-434-455-6712 (fax)

PSPC_TAC@l3harris.com (email)

Technical Training

UNITED STATES/CANADA

1-434-455-9469 (telephone)

1-434-455-6788 (fax)

wanda.mcgee@l3harris.com (email)

INTERNATIONAL

1-434-455-9469 (telephone)

1-434-455-6788 (fax)

wanda.mcgee@l3harris.com (email)

MAILING ADDRESS:

L3Harris Technologies

Public Safety and Professional Communications

221 Jefferson Ridge Parkway

Lynchburg, VA 24501

ATTENTION:

(Appropriate Department)

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**FOR APPLICATION IN THE USA ONLY
CUSTOMER FINANCIAL SERVICES**

NAME	FUNCTION	TELEPHONE	FAX
Don Hathaway	Chief Financial Senior Director, Finance	434-455-9223	434-455-6772
Mike Layman	Director, Financial Planning & Analysis	434-455-9685	434-455-6772
Marlene Streath	Manager, Bids & Proposal Finance	434-455-9286	434-455-6772

MAILING ADDRESS:

L3Harris Technologies
Public Safety and Professional Communications
221 Jefferson Ridge Parkway
Lynchburg, VA 24501

ATTENTION: _____
(Appropriate Department)

FOR APPLICATION IN THE USA ONLY
STANDARD PAYMENT TERMS AND FINANCING PLANS

Any deviation from “standard terms” must have prior approval by the Business Unit CFO before being quoted or obtaining a signed order from the purchaser. All orders are subject to acceptance at Lynchburg, Virginia.

OPEN ACCOUNT TERMS

1. Products & Services - Net 30 days from invoice date.
2. Systems & Trunking – Terms are based upon milestones established in the contract.

LATE CHARGES

If invoices are not paid when due, Late Charges will be assessed to the account at the legal rate allowed (usually 1.5% monthly) on the unpaid delinquent balance. Late Charges are due in full at the time of settlement.

CASH ON DELIVERY (COD)

- Order must be signed and 10% deposit required.
- Shipment must be direct to the customer.
- Carrier will require payment in the form of CASH, CASHIERS or CERTIFIED CHECK.

CASH WITH ORDER (CWO)

- Check must be for the total order value including tax and any premium freight charges.

REGULAR AND STANDBY LETTER OF CREDIT

- Letters of Credit are a guarantee of payment on account by the issuing Bank. This is a Credit/Sales tool used to open up new or marginal accounts until a satisfactory pay record has been established.

END USER FINANCING

Tax exempt financing for qualified end users acquiring L3Harris equipment and services is available through strategic financing partners, such as PNC, BOA, and other financing agencies. Sales Contact information is available on the L3Harris website.

FOR APPLICATION IN THE USA ONLY
ORDER ACCEPTANCE AND DOCUMENTATION

- All orders are subject to the most current version of L3Harris Technologies' Standard Terms and Conditions of Sale.
- ALL orders require Credit review and approval. Do Not release any "consignment" equipment until the order is approved.
- When placing an order on our Equipment Order Form, the exact legal name of the business must be shown along with the title or position of the person signing. If the customer elects to use his or her company's purchase order form in lieu of signing our order forms, the purchase order must show the following:
 1. PO must be made out to "L3Harris."
 2. Terms of payment must be indicated.
 3. A "ship to" address must be indicated.
 4. Total amount of the order must be indicated.
 5. Contract or PO is signed by the customer and authorized L3Harris personnel.
 6. Contract or order represents an irrevocable notice to proceed.
 7. All required frequencies have been licensed.
 8. Description of products being sold is stated.
 9. Estimated date of delivery is defined.
- A copy of the proposal and/or bid specifications, including payment terms and conditions of sale, must accompany our Equipment Order Form on all orders resulting from Bids and Proposals.
- All orders are subject to acceptance at Lynchburg, Virginia. In the event acceptance of a proposal by the customer would bind the company upon such acceptance by the customer, credit review and approval of the proposal must be obtained in advance.

FOR APPLICATION OUTSIDE THE USA

- Any order which does not comply with the international standard terms and conditions (including all orders submitted on customer purchase order forms) is subject to review and written acceptance by L3Harris Technologies at Lynchburg, Virginia.
- Should payment be by letter-of-credit, then it must:
 1. Be confirmed and irrevocable.
 2. Be placed on a major US bank.
 3. Have all banking charges the responsibility of the applicant.
 4. Stipulate payment on sight.
 5. Have an expiration date sufficient to allow manufacture of equipment.
 6. Be subject to acceptance at Lynchburg, Virginia.

All orders and related documents are legal agreements between the customer and L3Harris. Any deficiencies in these documents can seriously jeopardize our ability to enforce the contract. Any changes or alterations on the L3Harris order forms or the customer's purchase order must be initialed by the customer.

SALES TO LEASING COMPANIES

Communication equipment may be sold direct to a Leasing Company providing a financing service for an end user subject to the following:

- The order must identify the end user for warranty purposes.
- Equipment cannot be sold to a Leasing Company owned or controlled by a Dealer.
- A 10% deposit from the Leasing Company is required with the order.
- The order should be written on our Equipment Order Form and signed by an authorized officer. Purchase orders direct from a Leasing Company in lieu of a signed Equipment Order Form are subject to review and acceptance in regards to terms and conditions, i.e.; payment, delivery, cancellation, warranty, etc.

CUSTOMER CREDIT APPLICATION

L3Harris Technologies
Public Safety and Professional Communications
Attn: Customer Financial Services
221 Jefferson Ridge Parkway
Lynchburg, VA 24501

CUSTOMER LEGAL NAME: _____

COMPLETE STREET ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: _____ FAX: _____

FOR THE PURPOSE OF ESTABLISHING CREDIT, WE/I SUBMIT THE FOLLOWING DATA: _____

1. ANTICIPATED CREDIT REQUIREMENTS: \$ _____

2. BUSINESS STARTED (MO/YR): _____ TYPE BUSINESS: _____

3. BUSINESS IS A _____ CORPORATION _____ PARTNERSHIP _____ PROPRIETORSHIP _____

4. NAMES OF OFFICERS, PARTNERS OR OWNER(S):

NAME _____ TITLE _____

NAME _____ TITLE _____

NAME _____ TITLE _____

5. BANK REFERENCE:

NAME: _____ ACCT. # _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: _____ CONTACT: _____

6. TRADE REFERENCES (NO CREDIT CARD):

NAME: _____ ACCT. # _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: _____ CONTACT: _____

NAME: _____ ACCT. # _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: _____ CONTACT: _____

NAME: _____ ACCT. # _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: _____ CONTACT: _____

PLEASE ATTACH A COPY OF YOUR LATEST BALANCE SHEET AND P&L STATEMENTS WHICH WILL BE HELD IN STRICT CONFIDENCE AND USED ONLY FOR CREDIT PURPOSES.

SIGNATURE: _____ TITLE: _____ DATE: _____

FOR APPLICATION IN THE USA ONLY

UNIFORM COMMERCIAL CODE (UCC-1) FINANCING STATEMENT

PURPOSE

- To be filed/recorded with the Secretary of State and/or local County Clerk to perfect a security interest (lien) on the equipment being financed.

REQUIRED FOR

- All financing terms excluding the Equity Lease for Governmental Agencies.

COMPLETING THE UCC-1 FORM

- Most states require the UCC-1 form to be typed.
- Use complete legal name and address of the purchaser (same as on the contract).
- Secured Party is: L3Harris Technologies, Public Safety and Professional Communications, P.O. Box 2000, Lynchburg, VA 24501. (Will be signed in Lynchburg, Virginia.)

- List quantity and description of major items of equipment.
- Purchaser must sign (same as on the contract).

WHICH FORMS TO USE AND HOW MANY

- The next page contains a list by state showing the UCC-1 requirements. The requirements for filing are determined by each state and subject to change, therefore additional documentation could be required to perfect our security interest.

FOR APPLICATION IN THE USA ONLY
UNIFORM COMMERCIAL CODE (UCC-1)

State	Form Required	Copies Required
Alabama	Standard	1
Alaska	Alaska	1
Arizona	Arizona Only	1
Arkansas	Standard	2
California	California Only	1
Colorado	Standard	1
Connecticut	Standard	1
Delaware	Standard	1
District of Columbia	Standard	1
Florida	Florida Only	1
Georgia	Standard	1
Hawaii	Hawaii Only	1
Idaho	Standard	1
Illinois	Illinois Only	1
Indiana	Standard	1
Iowa	Standard	1
Kansas	Standard	1
Kentucky	Standard	1
Louisiana	Chattel Mortgage Only	NA
Maine	Standard	1
Maryland	Maryland Only	2
Massachusetts	Standard	2
Michigan	Michigan	1
Minnesota	Minnesota Only	1
Mississippi	Mississippi	2
Missouri	Standard	2
Montana	Standard	1
Nebraska	Standard	1
Nevada	Nevada Only	2
New Hampshire	Standard	2
New Jersey	New Jersey	1
New Mexico	Standard	1
New York	New York	2
North Carolina	Standard	2
North Dakota	Standard	1
Ohio	Standard	2
Oklahoma	Standard	1
Oregon	Oregon	1
Pennsylvania	Pennsylvania Only	2
Rhode Island	Standard	1
South Carolina	Standard	1
South Dakota	Standard	1
Tennessee	Standard	1
Texas	Texas Only	1
Utah	Utah	1
Vermont	Standard	2
Virginia	Virginia Only	2
Washington	Washington Only	1
West Virginia	Standard	2
Wisconsin	Standard	1
Wyoming	Standard	1

SUPPORT PACKAGES

Product Code: SS

Basic:

- Software Updates
- Technical support available 8 hours per day, 5 days per week
- Access to Tech-Link web portal

Standard:

- Software Updates
- Technical Support available 24 hours per day, 7 days per week
- Access to Tech-Link Web portal
- Extended Warranty
- Annual Consultation (System Purchases)

Enhanced:

- All items contained in the standard package plus optional offerings based on customer requirements.

Critical Communications Support (CCS) and Extended Warranty

L3Harris provides Critical Communications Support (CCS) and Extended Warranty options for L3Harris-Tait co-branded products. CCS is a unique blend of services and tools that enable customers to work proactively to ensure communications systems are operating at peak performance.

Our customers rely on their communications systems to protect lives. The CCS program helps L3Harris customers guard their systems against obsolescence brought on by continual advancements in mobile communications technology. The CCS program not only protects the customer's initial system investment, but helps that investment grow with technology advancements.

The CCS packages include technical service desk support for 24 hours per day, 7 days per week for Infrastructure (8 hours per day, 5 days per week for terminals), on-going software maintenance, and the ability to select extended warranty options. Optional services alongside the purchase of CCS include Onsite Preventive Maintenance Service and Onsite Dispatch-Restoration Service, NOC monitoring, customized training, and more.

CCS subscribers periodically receive software updates applicable to their systems and subscriber units. These releases contain improvements and enhancements for current generation system software as well as new product capability and the ability to enable licensed features. Customers are responsible for software installation; however, L3Harris can quote this service as an option to a Service Advantage package.

CCS subscriptions can be purchased on either an annual or multi-year basis. If extended warranty is also desired, it must be purchased at point of sale. Subscription fees are based upon the size and complexity of the customer's system. For specific pricing information, contact your assigned Sales Representative or the Technical Support Services team.

L3Harris recommends that customers purchase installation support from the Field Service organization. This support may range from on-site planning assistance to a complete preventive maintenance program to include the installation of the software upgrade. The Regional Service Manager prepares a customized quotation for such service.

CCS provides:

- Periodic software releases
- Free subscription to the Tech-Link Web page
- Technical support from the L3Harris Technical Assistance Center
- A system-wide update to the current software release for all system elements upon enrollment
- Enhancements for existing features
- New features built upon earlier generations of software
- The ability to enable licensed features

SUPPORT PACKAGES

Product Code: SS

Terminals

E/C	Model No.	List Price \$ (per unit per year)	Description
S	SS-Y1EWP-P25	35.00	WARRANTY, EXT, 1YR, L3HARRIS-TAIT P25 RADIO
S	SS-Y2EWP-P25	65.00	WARRANTY, EXT, 2YR, L3HARRIS-TAIT P25 RADIO
S	SS-Y3EWP-P25	90.00	WARRANTY, EXT, 3YR, L3HARRIS-TAIT P25 RADIO
S	SS-Y1EWP-DMR	30.00	WARRANTY, EXT, 1YR, L3HARRIS-TAIT DMR RADIO
S	SS-Y2EWP-DMR	55.00	WARRANTY, EXT, 2YR, L3HARRIS-TAIT DMR RADIO
S	SS-Y3EWP-DMR	75.00	WARRANTY, EXT, 3YR, L3HARRIS-TAIT DMR RADIO
Not available for TP3300			

All CCS packages will begin after the end of the Manufacturer's Warranty Period and will automatically include Extended Warranty. Coverage is capped at two additional years for the TP3300 terminal (five total years including Manufacturer's Warranty) and three additional years for all other terminals (five total year including Manufacturer's Warranty). CCS with Extended Warranty must be purchased at point of sale, accessories excluded (batteries, antennas, chargers, etc.).

Infrastructure

E/C	Model No.	List Price \$	Description
L	SS-SN4E	CALL	WARRANTY, EXTENDED, L3HARRIS-TAIT SYSTEM Requires MASS-NSN7Z
L	MASS-NSN7Z	CALL	SVC, CCS, L3HARRIS-TAIT SYSTEM
L	SS-SN4T	0.01	SVC, CC SUPPORT, SYSTEM, EXTENDED

CCS can be purchased at point of sale or after the System ships to the customer; however, there is an additional charge to purchase CCS after shipment.

Optional Infrastructure Extended Warranty Coverage: Extended Warranty may be added to any CCS agreement to cover normal wear and tear for up to five additional years after the Manufacturer's Warranty has expired for up to a total of seven years of coverage. Extended Warranty is not available without CCS and must be purchased at point of sale, prior to equipment shipping.

EXPORT CONTROL NOTE: Our products may require a validated Export License issued by the Department of Commerce prior to exporting from the United States.

Ordering Information

1. For infrastructure, a System Support Agreement must be completed by the salesperson and signed by the customer when the order is placed. The completed agreement should be sent directly to:

Manager, Technical Support Services
L3Harris Technologies, Inc.
221 Jefferson Ridge Parkway
P.O. Box 2000
Lynchburg, VA 24501

2. **If you have any questions on these services or need assistance in completing the agreement, please contact** Manager, Technical Support Services at the telephone or fax numbers shown below.

Telephone
1-800-528-7711 in the U.S. and Canada
1-434-385-2400 Worldwide

Fax
1-434-455-6712

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TECHNICAL TRAINING

Technical training courses are conducted at a customer's location. The List Prices provided are to conduct the course one time at a facility provided by the customer within the continental United States for up to eight students and includes the instructor's travel and living expenses.

TAIT-POWERED DMR TIER III TRAINING

Three courses on the Tait-powered DMR Tier III system solution are recommended for network managers, communication engineers, technical support personnel, and maintenance technicians. The following table provides a list of standard training courses. The table includes the course number and length.

	Course No.	On-Site
Tait-Powered DMR Tier III Training		
DMR Tier III Configuration & Maintenance	YTSN4J-B	5 days
DMR Tier III EnableFleet Configuration & Management	YTSN4K-B	5 days
DMR Tier III GridLink Configuration & Operation	YTSN4L-B	5 days

Please note that on-site delivery of the *DMR Tier III EnableFleet Configuration & Management* and *DMR Tier III GridLink Configuration & Operation* courses can each be reduced from 5 days to 2½ days if conducted consecutively with the *DMR Tier III Configuration & Maintenance* course.

E/C	Model No.	List Price \$	Description
N	YTSN4J-B	22,685.00	DMR TIER III CONFIGURATION & MAINTENANCE This course provides participants with a working knowledge of setting up and supporting the operation of the Tait-powered DMR Tier III system. The course will help students become familiar with the key features of their new system. Topics include fleet management, mobile and portable radio configuration as well as network features, diagnostics, and basic maintenance. Upon completion of this course, participants will be able to describe DMR subscriber numbering; describe DMR call features; demonstrate basic use of the subscriber unit programming software; use the programming software to configure a subscriber unit to operate on a trunked network; successfully upgrade the firmware in a subscriber unit; describe features and architecture of the TB9300; demonstrate configuration, monitoring, module replacement and testing of the TB9300; demonstrate DMR site commissioning procedures; perform fleet management tasks of the Network Management Interface; perform configuration tasks of the Network Management Interface; and demonstrate operation of EnableMonitor.
N	YTSN4K-B	22,685.00	DMR TIER III ENABLEFLEET CONFIGURATION & MANAGEMENT This course allows students to understand key aspects of the EnableFleet system. The architecture and features of EnableFleet are introduced, followed with significant practical sessions on how to manage radio configuration using the Manager and Client interfaces. A review of radio unit programming is used to create configuration templates and develop EnableFleet customization profiles. Upon completion of this course, participants will be able to explain the fleet management features of EnableFleet; describe the data sources managed by EnableFleet; describe the features and functions of EnableFleet Manager; describe the features and functions of EnableFleet Client; define the scope of requirements for radio unit programming, use the programming software to configure a radio unit to generate a group configuration template; generate group customization profiles and perform device import to EnableFleet; perform configuration and diagnostics of DMR Mobile IP demonstrate configuration and operation of EnableFleet Manager; and demonstrate operation of EnableFleet Client.

TECHNICAL TRAINING

TAIT-POWERED DMR TIER III TRAINING (Cont'd)

E/C	Model No.	List Price \$	Description
N.....	YTSN4L-B	22,685.00.....	DMR TIER III GRIDLINK CONFIGURATION & OPERATION This course introduces participants to the GridLink network architecture and numbering requirements. Practical sessions allow the student to get familiar with configuration of the SCADA Gateway and TD9300 Data Terminal. Upon completion of this course, participants will be able to explain trunking; describe DMR call types; describe DMR call features; describe DMR subscriber numbering; demonstrate basic use of the subscriber unit programming software; use the programming software to configure a subscriber unit to operate on a trunked network; explain the features of the DMR Network Management Interface; perform fleet management tasks of the Network Management Interface; explain the network features and benefits of the GridLink solution; describe the architecture and features of the GridLink network; describe the available GridLink data services, and call handling mechanisms; describe channel management techniques and the application to a GridLink solution; describe the key system engineering considerations for implementing a GridLink solution on a Tait-powered DMR Tier III network; design a successful addressing scheme for GridLink; demonstrate configuration of a Tait-powered GridLink system; and integrate and test the GridLink solution.

TECHNICAL TRAINING

TAIT-POWERED P25 CONVENTIONAL TRAINING

The *P25 Conventional Configuration & Maintenance Course* on the Tait-powered P25 conventional system solution is recommended training for network managers, communication engineers, technical support personnel, and maintenance technicians. The following table provides a list of the standard training course. The table includes the course number and length.

	Course No.	On-Site
Tait-Powered P25 Conventional Training		
P25 Conventional Configuration & Maintenance	YTSN4M-B	5 days

E/C	Model No.	List Price \$	Description
N	YTSN4M-B	22,685.00	P25 CONVENTIONAL CONFIGURATION & MAINTENANCE This course provides an advanced working knowledge of the Tait-powered P25 conventional system. The course covers system monitoring, basic fault diagnostics, the configuration of replacement parts, and the replacement of faulty modules. Upon completion of this course, participants will be able to identify the devices and modules that make up the Tait-powered P25 conventional radio system; monitor network status using Syslog and the Customer Service Software (CSS) and identify faulty devices or modules; create backups of the network configuration; exchange faulty repeater equipment (i.e., Repeater, Power Amplifier, Power Management Unit); demonstrate the correct preparation of a spare repeater and CG; demonstrate the correct procedure to upgrade the network software; and demonstrate the ability to troubleshoot the network and locate the fault.

TECHNICAL TRAINING

TAIT-POWERED P25 TRUNKING TRAINING

Three courses on the Tait-powered P25 trunking system solution are recommended for network managers, communication engineers, technical support personnel, and maintenance technicians. The following table provides a list of standard training courses. The table includes the course number and length.

	Course No.	On-Site
Tait-Powered P25 Trunking Training		
P25 Trunking Configuration & Maintenance	YTSN4N-B	5 days
P25 Trunking EnableFleet Configuration & Management	YTSN4P-B	5 days
P25 Trunking KMF Configuration, Administration & Management	YTSN4R-B	5 days

Please note that on-site delivery of the *P25 Trunking EnableFleet Configuration & Management* and *P25 Trunking KMF Configuration, Administration & Management* courses can each be reduced from 5 days to 2½ days if conducted consecutively with the *P25 Trunking Configuration & Maintenance* course.

E/C	Model No.	List Price \$	Description
N.....	YTSN4N-B.....	22,685.00.....	P25 TRUNKING CONFIGURATION & MAINTENANCE This course provides an advanced working knowledge of the Tait-powered P25 trunked system. The course covers system monitoring, basic fault diagnostics, the configuration of replacement parts, and the replacement of faulty modules. Upon completion of this course, participants will be able to identify the devices and modules that make up the Tait-powered P25 trunked radio system; monitor network status using SNMP and identify faulty devices; monitor repeater status using the Customer Service Software (CSS) and identify faulty modules; create backups of the network configuration; exchange faulty network equipment (e.g., Universal Controllers); and exchange faulty repeater equipment (i.e., Reciter, Power Amplifier, Power Management Unit).
N.....	YTSN4P-B.....	22,685.00.....	P25 TRUNKING ENABLEFLEET CONFIGURATION & MANAGEMENT This course allows students to understand key aspects of the EnableFleet system. The architecture and features of EnableFleet are introduced, followed by practical sessions on how to manage radio configuration using the manager and client interfaces. A review of radio unit programming is used to create configuration templates and develop EnableFleet customization profiles. Upon completion of this course, participants will be able to explain the fleet management features of EnableFleet; describe the data sources managed by EnableFleet; describe the features and functions of the EnableFleet Manager; describe the features and functions of the EnableFleet Client; define the scope of requirements for radio unit programming; use the programming software to configure a radio unit to generate a *group configuration template; generate group customization profiles and perform device import to EnableFleet; demonstrate configuration and operation of the EnableFleet Manager; and demonstrate operation of the EnableFleet Client.
N.....	YTSN4R-B.....	22,685.00.....	P25 TRUNKING KMF CONFIGURATION, ADMINISTRATION & MANAGEMENT This course is for customers who are implementing the Key Management Facility (KMF) on their Tait-powered P25 trunking radio system. The course includes an introduction to P25 encryption, Key Fill Device operation, and KMF configuration, operation and administration. Upon completion of this course, participants will be able to demonstrate logging into the KMF server; carry out the initial tasks a Security Officer must complete to prepare the KMF for use by Crypto Officers; explain the effect of changing the system security settings; carry out the initial tasks a Crypto Officer must complete to prepare the KMF to manage keys; create provisioning keys and provision radios; create and monitor key update tasks; manage lost or stolen radios; carry out diagnostics and manage problem radios; demonstrate backing up and restoring the database; and demonstrate monitoring the KMF and retrieving log files.

TECHNICAL TRAINING

TAIT-POWERED ANALOG SIMULCAST IP TRAINING

The *P25 Conventional Configuration & Maintenance Course* on the Tait-powered P25 conventional system solution is recommended training for network managers, communication engineers, technical support personnel, and maintenance technicians. The following table provides a list of standard training courses. The table includes the course number and length.

	Course No.	On-Site
Tait-Powered Analog Simulcast IP Training		
Analog Simulcast Configuration & Maintenance	YTSN4S-B	4 days

E/C	Model No.	List Price \$	Description
N	YTSN4S-B	18,450.00	ANALOG SIMULCAST CONFIGURATION & MAINTENANCE This course enables participants to perform key system support and maintenance tasks on the Tait-powered Analog Simulcast IP (AS-IP) system and includes TB9400 configuration and maintenance. Upon completion of this course, participants will be able to identify the devices and modules that make up the Tait-powered Analog Simulcast radio system; monitor network status using Syslog and the web interface, and identify faulty devices or modules; create backups of the network configuration; exchange faulty repeater equipment (i.e., Reciter, Power Amplifier, Power Management Unit); demonstrate the correct preparation of a spare repeater and CG; demonstrate the correct procedure to upgrade the network software; and demonstrate the ability to troubleshoot the network and locate the fault.

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TP9600 P25 Portable Radio



The L3Harris TP9600 offers 12.5 kHz P25 Phase 1 FDMA conventional/trunked and 6.25 kHz equivalent P25 Phase 2 TDMA trunked capability as well as analog operation. Designed for ease of use, this P25 Portable features intuitive controls and a color screen for enhanced usability. Active noise cancellation and noise suppression technologies reduce background sounds while enhancing voice transmissions, ensuring First Responders have loud and clear audio.

Each radio comes with the following hardware features as standard:

- GPS Display
- MDC1200 Encode/Decode
- P25 Trunked PSTN Dialling
- Two-Tone Decode
- Voice Annunciations
- Bluetooth®
- 5-Tone Selcall
- Alphanumeric ID
- P25 OTAP Capability*
- WiFi® OTAP Capability*

*Requires EnableFleet

Step One (1 of 4) – Select a radio body [based on the frequency band, and keypad type] and an antenna option.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – SCAN (4-Key)			
S	TP9655B1BC-H	Portable, TP9600, 136-174M, Scn, Blk	\$1,450.00
VHF (136-174 MHz) – SYSTEM (16-Key)			
S	TP9660B1BC-H	Portable, TP9500, 136-174M, Sys, Blk	\$1,500.00

E/C	Model Number	Description	List Price
VHF Antenna Options			
S	TPA-AN-001	Antenna, 136-225MHz, Hel Tun	\$22.00
S	TPA-AN-002	Antenna, 136-151MHz, Hel	\$22.00
S	TPA-AN-003	Antenna, 150-162MHz, Hel	\$22.00
S	TPA-AN-004	Antenna, 162-174MHz, Hel	\$22.00
S	TPA-AN-034	Antenna, 136-174MHz, Hel	\$30.00
UHF-L (378 – 470 MHz) - SCAN (4-Key)			
S	TP9655HKBC-H	Portable, TP9600, 378-470M, Scn, Blk	\$1,450.00
UHF-L (378 – 470 MHz) – SYSTEM (16-Key)			
S	TP9660HKBC-H	Portable, TP9600, 378-470M, Sys, Blk	\$1,500.00
UHF-L Antenna Options			
S	TPA-AN-037	Antenna, 378-470MHz, 1/4 Wave Whip	\$22.00
S	TPA-AN-038	Antenna, 378-470MHz, Hel	\$22.00
S	TPA-AN-011	Antenna, 400-470MHz, Whip	\$22.00
S	TPA-AN-013	Antenna, 400-470MHz, Hel	\$22.00

TP9600

E/C	Model Number	Description	List Price
UHF-H (450 – 520 MHz) - SCAN (4-Key)			
S	TP9655H7BC-H	Portable, TP9600, 450-520M, Scn, Blk	\$1,450.00
UHF-H (450 – 520 MHz) – SYSTEM (16-Key)			
S	TP9660H7BC-H	Portable, TP9600, 450-520M, Sys, Blk	\$1,500.00
UHF-H Antenna Options			
S	TPA-AN-012	Antenna, 450-520MHz, Whip	\$22.00
S	TPA-AN-015	Antenna, 450-520MHz, Hel	\$22.00
700/800 MHz (764 – 870 MHz) - SCAN (4-Key)			
S	TP9655K5BC-H	Portable, TP9600, 762-870M, Scn, Blk	\$1,450.00
700/800 MHz (764 – 870 MHz) - SYSTEM (16-Key)			
S	TP9660K5BC-H	Portable, TP9600, 762-870M, Sys, Blk	\$1,500.00
700/800 Antenna Options			
S	TPA-AN-022	Antenna, 762-870MHz, 1/2 Wave Whip	\$22.00
S	TPA-AN-028	Antenna, 762-870MHz, 1/4 Wave Stub	\$22.00

Step Two (2 of 4) – Select a battery and a charger

E/C	Model Number	Description	List Price
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Battery Options

S	T03-00011-AAAA	Battery, Li-Ion 1880mAh	\$93.00
S	T03-00011-ABAA	Battery, Li-Ion 1880mAh w/ Belt Clip	\$104.00
S	T03-00011-CAAA	Battery, Li-Ion 2400mAh	\$114.00
S	T03-00011-CBAA	Battery, Li-Ion 2400mAh w/ Belt Clip	\$125.00
S	TPA-CA-201	Belt Clip 55mm	\$11.00
S	TPA-CA-207	Belt Loop for D-Clip 75mm	\$20.00
S	TPA-CA-208	Belt Clip Adaptor for 55mm	\$16.00

Charger Options

S	T03-00012-AAFA	Charger Single Fast Li-Ion No plug pack	\$66.00
S	T03-00012-AEFA	Charger, Single Bay, Li-Ion w/ plug pack	\$83.00
S	T03-00013-AEDA	Charger, Multi Bay, Li-Ion w/ cable	\$805.00
S	T03-00013-AADA	Charger Multi Li-Ion No cable	\$765.00
S	009-00017-01	PSU Plug Pack 12V 2A US	\$17.00
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

Step Three (3 of 4) – Radio body above comes in standard Analog mode. If desired, select an operating mode and any additional add on software feature options. Please refer to the notes in red to determine if there is a prerequisite for any of the software features below.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TPAS050	SFE - P25 Common Air Interface (CAI)	\$265.00
S	TPAS055	SFE - P25 Trunking Phase 1 (TPAS050 Prerequisite)	\$700.00
S	TPAS091	SFE - P25 Trunking Phase 2 (TPAS055 Prerequisite)	\$265.00
S	TPAS151	SFE- P25 Trunking Services Phase 1 (Includes TPAS050, TPAS055, and TPAS064 P25 PSTN)	\$940.00
S	TPAS152	SFE- P25 Trunking Services Phase 2 (Includes TPAS050, TPAS055, TPAS091, and TPAS064 P25 PSTN)	\$1,180.00

Encryption – Software Features

S	TPAS058	SFE - Multi Key AES Encryption (TPAS057 Prerequisite)	\$600.00
S	TPAS057	SFE - Multi Key DES Encryption	\$250.00
S	TPAS156	SFE – P25 OTAR (Includes TPAS054 and TPAS063 OTAR)	\$560.00
S	TPAS153	SFE - DES/AES Encryption Combo (Includes TPAS057 and TPAS058)	\$765.00
S	TPAS154	SFE - Non-CAP Encryption ARC4/DES (Includes TPAS053 DES Enc and TPAS102 Arc4 Enc)	\$255.00
S	TPAS157	SFE – CAP Security Bundle (Includes TPAS054 and TPAS063 OTAR and TPAS058)	\$1,040.00

Data Enablers – Software Features

S	TPAS075	SFE - P25 OTAP (TPAS055 Prerequisite)	\$50.00
S	TPAS155	SFE -Location Services (Includes TPAS067 GPS Tx, TPAS089 Enhanced Loc, TPAS098 Trk GPS Tx, and TPAS105 Geofencing)	\$300.00
S	TPAS105	SFE - Geofencing Services	\$156.00
S	TPAS158	SFE - Data Bundle (Includes TPAS056 IP Data and TPAS060 P25 Radio API)	\$350.00

System Administration Enablers – Software Features

S	TPAS051	SFE - P25 Administration Service (TPAS050 Prerequisite)	\$541.00
S	TPAS056	SFE - User IP Data (TPAS050 Prerequisite)	\$250.00
S	TPAS060	SFE - Tait Radio API	\$136.00

TP9600

E/C	Model Number	Description	List Price
Radio Enhancement Enablers – Software Features			
S	TPAS086	SFE - Enhanced Channel Capacity	\$84.00
S	TPAS083	SFE - 20/25khz Wideband Enable (Not available to US FCC-regulated customers)	\$0.01
S	TPAS100	SFE - Link Layer Authentication (TPAS055 Prerequisite. For use with Motorola systems only)	\$100.00

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

Step Four (4 of 4) – Select any additional accessories desired

E/C	Model Number	Description	List Price
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Vehicle Charger Options

S	T03-00014-BAAB	Charger, Vehicle	\$385.00
S	T03-00014-AAAA	Charger, Vehicle, Battery Only, TP9000	\$158.00

Speaker Microphones

S	T03-00045-JFAC	SpkrMic, Evolution, E-Button, 2.5mm	\$186.00
S	T03-00045-KFAC	SpkrMic, Storm, E-Button, 2.5mm, IP68	\$215.00
S	T03-00045-DMAC	SpkrMic, Genesis, E-Button, IP68	\$279.00
S	T03-00045-ERAA	Spkr Mic Light-Weight 3.5mm-Jack	\$63.00
S	T03-00045-FRAA	Spkr Mic Medium-Weight 3.5mm-Jack	\$67.00

Audio Accessories - Headsets

S	T03-00046-FAAB	Headset, Heavy-Duty Overhead	\$607.00
S	T03-00046-FEAB	Headset, Heavy-Duty Behind-Head	\$607.00
S	T03-00046-GEAA	Headset, Hurricane II Behind Head	\$571.00

Audio Accessories – Surveillance Kits

S	T03-00047-AAAA	Kit, 2-Wire Surveillance	\$233.00
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Audio Accessories – Ear Pieces

S	T03-00053-0451	Earphone In-Ear 2.5mm	\$69.00
S	T03-00120-AAAD	Eartube In-Ear 2.5mm	\$20.00
S	T03-00120-BAAD	Earhook 2.5mm	\$12.00
S	T03-00120-FAAD	Eartube Earhook 2.5mm	\$20.00
S	T03-00120-GAAD	Earhook Transparent Hi-Vol 2.5mm	\$12.00
S	T03-00120-HAAD	Earphone Transparent D-Ring Hi-Vol 2.5mm	\$12.00
S	T952-055	Erhanger 2.5mm	\$39.00

E/C	Model Number	Description	List Price
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Carrying Case - Leather			
S	T03-00079-0001	Case Hvy Duty Lther DStud BLoop TP95/96	\$73.00
S	T03-00079-0002	Case Hvy Duty Leathr Spring Clip TP95/96	\$63.00
S	T03-00079-0005	Case Soft Leather Use Batt Clip TP95/96	\$39.00
S	T03-00079-0007	Case Hvy Duty Leathr BLoop Dring TP95/96	\$56.00

Carrying Case – Nylon			
S	T03-00079-0003	Case Nylon D-Stud B/Loop TP95/96	\$59.00
S	T03-00079-0004	Case Nylon Use Battery Clip TP95/96	\$42.00
S	T03-00079-0006	Case Nylon D-Stud Chest Harness TP95/96	\$100.00

Carrying Case Accessories			
S	T03-00038-0022	Belt Loop for D-Stud 55mm	\$20.00
S	T03-00038-0023	Spring Clip for D-Stud 40mm	\$20.00
S	T03-00038-0030	Battery Spacer Case Heavy Duty Leather	\$2.00
S	T03-00038-0034	Shoulder Strap Case Heavy Duty Leather	\$36.00

Programming and Servicing Kits			
S	T02-00031-0002	P25 Programming & Calibration Kit	\$450.00
S	T02-00031-0001	TM/TP Programming & Calibration Kit	\$450.00
S	T03-00118-0601	USB to RJ11 Programming Cable	\$137.00
S	T03-00118-0101	TP81/93/94 Programming Adaptor	\$45.00
S	TPA-SV-006	Radio Programming Lead Serial PC to RJ12	\$69.00
S	T03-00011-FAAA	TP81/93/94 DC Service Adaptor	\$103.00
S	T03-00040-0001	P81/TP93/TP94 Service Kit	\$725.00
S	T03-00118-5301	TP8100 Assembly Tool Kit	\$292.00
S	TOPA-SV-024	Terminals Calibration Box	\$235.00
S	T03-00118-0201	TP81/93/94 Calibration Adaptor	\$44.00
S	T03-00118-0202	TP81/93/94 Calibration Low Pass Filter	\$38.00

TP9400 P25 Portable Radio



The L3Harris TP9400 may be the smallest P25 Phase 2-capable portable but it is uncompromising in meeting the demands of those serving our communities. With analog, 12.5 kHz P25 Phase 1 FDMA conventional/trunked and 6.25 kHz equivalent P25 Phase 2 TDMA trunked capability in a single device, you can transition to a more spectrally efficient solution in a time frame that suits you.

Each radio comes with the following hardware features as standard:

- GPS Display
- MDC1200 Encode/Decode
- P25 Trunked PSTN Dialling
- Two-Tone Decode
- Voice Annunciations
- Bluetooth®

Step One (1 of 4) – Select a radio body [based on the frequency band, keypad type, and color] and an antenna option.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – SCAN (4-Key)			
S	TP9405B1BB	Portable, TP9400, 136-174M, Scn, Blk	\$920.00
S	TP9405B1CB	Portable, TP9400, 136-174M, Scn Red	\$970.00
S	TP9405B1DB	Portable, TP9400, 136-174M, Scn Yel	\$970.00
S	TP9405B1EB	Portable, TP9400, 136-174M, Scn Org	\$970.00
S	TP9405B1FB	Portable, TP9400, 136-174M, Scn Grn	\$970.00

E/C	Model Number	Description	List Price
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VHF (136-174 MHz) – SYSTEM (16-Key)

S	TP9406B1BB	Portable, TP9400, 136-174M, Sys, Blk	\$995.00
S	TP9406B1CB	Portable, TP9400, 136-174M, Sys, Red	\$1,045.00
S	TP9406B1DB	Portable, TP9400, 136-174M, Sys, Yel	\$1,045.00
S	TP9406B1EB	Portable, TP9400, 136-174M, Sys, Org	\$1,045.00
S	TP9406B1FB	Portable, TP9400, 136-174M, Sys, Grn	\$1,045.00

VHF Antenna Options

S	TPA-AN-001	Antenna, 136-225MHz, Hel Tun	\$22.00
S	TPA-AN-002	Antenna, 136-151MHz, Hel	\$22.00
S	TPA-AN-034	Antenna, 136-174MHz, Hel	\$30.00
S	TPA-AN-003	Antenna, 150-162MHz, Hel	\$22.00
S	TPA-AN-004	Antenna, 162-174MHz, Hel	\$22.00

UHF-L (378 – 470 MHz) - SCAN (4-Key)

S	TP9405HKBB	Portable, TP9400, 378-470M, Scn, Blk	\$920.00
S	TP9405HKCB	Portable, TP9400, 378-470M, Scn, Red	\$970.00
S	TP9405HKDB	Portable, TP9400, 378-470M, Scn, Yel	\$970.00
S	TP9405HKEB	Portable, TP9400, 378-470M, Scn, Org	\$970.00
S	TP9405HKFB	Portable, TP9400, 378-470M, Scn, Grn	\$970.00

UHF-L (378 – 470 MHz) – SYSTEM (16-Key)

S	TP9406HKBB	Portable, TP9400, 378-470M, Sys, Blk	\$995.00
S	TP9406HKCB	Portable, TP9400, 378-470M, Sys, Red	\$1,045.00
S	TP9406HKDB	Portable, TP9400, 378-470M, Sys, Yel	\$1,045.00
S	TP9406HKEB	Portable, TP9400, 378-470M, Sys, Org	\$1,045.00
S	TP9406HKFB	Portable, TP9400, 378-470M, Sys, Grn	\$1,045.00

UHF-L Antenna Options

S	TPA-AN-037	Antenna, 378-470MHz, 1/4 Wave Whip	\$22.00
S	TPA-AN-038	Antenna, 378-470MHz, Hel	\$22.00
S	TPA-AN-011	Antenna, 400-470MHz, Whip	\$22.00
S	TPA-AN-013	Antenna, 400-470MHz, Hel	\$22.00

TP9400

E/C	Model Number	Description	List Price
UHF-H (450 – 520 MHz) - SCAN (4-Key)			
S	TP9405H7BB	Portable, TP9400, 450-520M, Scn, Blk	\$920.00
S	TP9405H7CB	Portable, TP9400, 450-520M, Scn, Red	\$970.00
S	TP9405H7DB	Portable, TP9400, 450-520M, Scn, Yel	\$970.00
S	TP9405H7EB	Portable, TP9400, 450-520M, Scn, Org	\$970.00
S	TP9405H7FB	Portable, TP9400, 450-520M, Scn, Grn	\$970.00
UHF-H (450 – 520 MHz) – SYSTEM (16-Key)			
S	TP9406H7BB	Portable, TP9400, 450-520M, Sys, Blk	\$995.00
S	TP9406H7CB	Portable, TP9400, 450-520M, Sys, Red	\$1,045.00
S	TP9406H7DB	Portable, TP9400, 450-520M, Sys, Yel	\$1,045.00
S	TP9406H7EB	Portable, TP9400, 450-520M, Sys, Org	\$1,045.00
S	TP9406H7FB	Portable, TP9400, 450-520M, Sys, Grn	\$1,045.00
UHF-H Antenna Options			
S	TPA-AN-012	Antenna, 450-520MHz, Whip	\$22.00
S	TPA-AN-015	Antenna, 450-520MHz, Hel	\$22.00
700/800 MHz (764 – 870 MHz) - SCAN (4-Key)			
S	TP9405K5BB	Portable, TP9400, 762-870M, Scn, Blk	\$920.00
S	TP9405K5CB	Portable, TP9400, 762-870M, Scn, Red	\$970.00
S	TP9405K5DB	Portable, TP9400, 762-870M, Scn, Yel	\$970.00
S	TP9405K5EB	Portable, TP9400, 762-870M, Scn, Org	\$970.00
S	TP9405K5FB	Portable, TP9400, 762-870M, Scn, Grn	\$970.00
700/800 MHz (764 – 870 MHz) - SYSTEM (16-Key)			
S	TP9406K5BB	Portable, TP9400, 762-870M, Sys, Blk	\$995.00
S	TP9406K5CB	Portable, TP9400, 762-870M, Sys, Red	\$1,045.00
S	TP9406K5DB	Portable, TP9400, 762-870M, Sys, Yel	\$1,045.00
S	TP9406K5EB	Portable, TP9400, 762-870M, Sys, Org	\$1,045.00
S	TP9406K5FB	Portable, TP9400, 762-870M, Sys, Grn	\$1,045.00
700/800 Antenna Options			
S	TPA-AN-022	Antenna, 762-870MHz, 1/2 Wave Whip	\$22.00
S	TPA-AN-028	Antenna, 762-870MHz, 1/4 Wave Stub	\$22.00

Step Two (2 of 4) – Select a battery and a charger

E/C	Model Number	Description	List Price
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Battery Options

S	T03-00011-AAAA	Battery, Li-Ion 1880mAh	\$93.00
S	T03-00011-ABAA	Battery, Li-Ion 1880mAh w/ Belt Clip	\$104.00
S	T03-00011-CAAA	Battery, Li-Ion 2400mAh	\$114.00
S	T03-00011-CBAA	Battery, Li-Ion 2400mAh w/ Belt Clip	\$125.00
S	TPA-CA-201	Belt Clip 55mm	\$11.00
S	TPA-CA-207	Belt Loop for D-Clip 75mm	\$20.00
S	TPA-CA-208	Belt Clip Adaptor for 55mm	\$16.00

Charger Options

S	T03-00012-AAFA	Charger Single Fast Li-Ion No plug pack	\$66.00
S	T03-00012-AEFA	Charger, Single Bay, Li-Ion w/ plug pack	\$83.00
S	T03-00013-AEDA	Charger, Multi Bay, Li-Ion w/ cable	\$805.00
S	T03-00013-AADA	Charger Multi Li-Ion No cable	\$765.00
S	009-00017-01	PSU Plug Pack 12V 2A US	\$17.00
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

Step Three (3 of 4) – Radio body above comes in standard Analog mode. If desired, select an operating mode and any additional add on software feature options. Please refer to the notes in red to determine if there is a prerequisite for any of the software features below.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TPAS050	SFE - P25 CAI	\$265.00
S	TPAS055	SFE - P25 Trunking Phase 1 (TPAS050 Prerequisite)	\$700.00
S	TPAS091	SFE - P25 Trunking Phase 2 (TPAS055 Prerequisite)	\$265.00

Encryption – Software Features

S	TPAS109	SFE - Single Key AES, DES, ARC4 Enc	\$50.00
S	TPAS058	SFE - Multi Key AES Encryption	\$600.00
S	TPAS057	SFE - Multi Key DES Encryption (TPAS109 or TPAS058 Prerequisite)	\$250.00
S	TPAS143	SFE - P25 OTAR (TPAS058 Prerequisite)	\$350.00
S	TPAS145	SFE - Security Bundle (Includes AES and OTAR)	\$800.00

Data Enablers – Software Features

S	TPAS075	SFE - P25 OTAP (TPAS055 Prerequisite)	\$50.00
S	TPAS142	SFE - GPS Location Services (TPAS050 Prerequisite)	\$200.00
S	TPAS146	SFE - Data Bundle (Includes Location Services, OTAP) (TPAS050/55 Prerequisite)	\$300.00

System Administration Enablers – Software Features

S	TPAS051	SFE - P25 Administration Service (TPAS050 Prerequisite)	\$541.00
S	TPAS056	SFE - User IP Data (TPAS050 Prerequisite)	\$250.00
S	TPAS060	SFE - Tait Radio API	\$136.00

Radio Enhancement Enablers – Software Features

S	TPAS086	SFE - Enhanced Channel Capacity	\$84.00
S	TPAS083	SFE - 20/25kHz Wideband Enable (Not available to US FCC-regulated customers)	\$0.01
S	TPAS100	SFE - Link Layer Authentication (For use with Motorola systems only)	\$100.00

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

Step Four (4 of 4) – Select any additional accessories desired			
E/C	Model Number	Description	List Price
Vehicle Charger Options			
S	T03-00014-BAAB	Charger, Vehicle	\$385.00
S	T03-00014-AAAA	Charger, Vehicle, Battery Only	\$158.00
Speaker Microphones			
S	T03-00045-JFAC	SpkrMic, Evolution, E-Button, 2.5mm	\$186.00
S	T03-00045-KFAC	SpkrMic, Storm, E-Button, 2.5mm, IP68	\$215.00
S	T03-00045-DMAC	SpkrMic, Genesis, E-Button, IP68	\$279.00
S	T03-00045-ERAA	Spkr Mic Light-Weight 3.5mm-Jack	\$63.00
S	T03-00045-FRAA	Spkr Mic Medium-Weight 3.5mm-Jack	\$67.00
Audio Accessories - Headsets			
S	T03-00046-FAAB	Headset, Heavy-Duty Overhead	\$607.00
S	T03-00046-FEAB	Headset, Heavy-Duty Behind-Head	\$607.00
S	T03-00046-GEAA	Headset, Hurricane II Behind Head	\$571.00
Audio Accessories – Surveillance Kits			
S	T03-00047-AAAA	Kit, 2-Wire Surveillance	\$233.00
Audio Accessories – Ear Pieces			
S	T03-00053-0451	Earphone In-Ear 2.5mm	\$69.00
S	T03-00120-AAAD	Eartube In-Ear 2.5mm	\$20.00
S	T03-00120-BAAD	Earhook 2.5mm	\$12.00
S	03-00120-FAAD	Eartube Earhook 2.5mm	\$20.00
S	T03-00120-GAAD	Earhook Transparent Hi-Vol 2.5mm	\$12.00
S	T03-00120-HAAD	Earphone Transparent D-Ring Hi-Vol 2.5mm	\$12.00
S	T952-055	Erhanger 2.5mm	\$39.00
Carrying Case - Leather			
S	T03-00038-0004	Case Hvy Duty Leather 4Key DStud B/Loop	\$66.00
S	T03-00038-0005	Case Hvy Duty Leather 4Key Spring Clip	\$57.00
S	T03-00038-0006	Case Hvy Duty Leather 4Key B/Loop	\$51.00
S	T03-00038-0007	Case Hvy Duty Leather 16Key DStud B/Loop	\$66.00
S	T03-00038-0008	Case Hvy Duty Leather 16Key Spring Clip	\$57.00

E/C	Model Number	Description	List Price
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Carrying Case – Leather (Cont'd)			
S	T03-00038-0009	Case Hvy Duty Leather 16Key B/Loop	\$51.00
S	T03-00038-0036	Case Hvy Duty Leather 4Key B/Loop Dring	\$51.00
S	T03-00038-0037	Case Hvy Duty Leather 16Key B/Loop Dring	\$51.00
S	T03-00038-0020	Case Soft Leather 4Key Use Batt Clip	\$35.00
S	T03-00038-0021	Case Soft Leather 16Key Use Batt Clip	\$35.00

Carrying Case – Nylon			
S	T03-00038-0013	Case Nylon 4Key D-Stud B/Loop	\$54.00
S	T03-00038-0014	Case Nylon 4Key B/Loop	\$38.00
S	T03-00038-0015	Case Nylon 4Key Use Battery Clip	\$38.00
S	T03-00038-0016	Case Nylon 16Key D-Stud B/Loop	\$54.00
S	T03-00038-0017	Case Nylon 16Key B/Loop	\$38.00
S	T03-00038-0018	Case Nylon 16Key Use Battery Clip	\$38.00
S	T03-00038-0025	Case Nylon 4Key Use Battery Clip Org	\$38.00
S	T03-00038-0026	Case Nylon 16Key Use Battery Clip Org	\$38.00
S	T03-00038-0028	Case Nylon 4Key D-Stud Chest Harness	\$90.00
S	T03-00038-0029	Case Nylon 16Key D-Stud Chest Harness	\$90.00
S	T03-00038-0032	Case Poly 4Key Use Battery Clip Grn	\$38.00
S	T03-00038-0033	Case Poly 16Key Use Battery Clip Grn	\$38.00

Carrying Case Accessories			
S	T03-00038-0022	Belt Loop for D-Stud 55mm	\$20.00
S	T03-00038-0023	Spring Clip for D-Stud 40mm	\$20.00
S	T03-00038-0030	Battery Spacer Case Heavy Duty Leather	\$2.00
S	T03-00038-0034	Shoulder Strap Case Heavy Duty Leather	\$36.00

E/C	Model Number	Description	List Price
Programming Kits			
S	T02-00031-0002	P25 Programming & Calibration Kit	\$450.00
S	T02-00031-0001	TM/TP Programming & Calibration Kit	\$450.00
S	T03-00118-0601	USB to RJ11 Programming Cable	\$137.00
S	T03-00118-0101	TP81/93/94 Programming Adaptor	\$45.00
S	TPA-SV-006	Radio Programming Lead Serial PC to RJ12	\$69.00
S	T03-00011-FAAA	TP81/93/94 DC Service Adaptor	\$103.00
S	T03-00040-0001	P81/TP93/TP94 Service Kit	\$725.00
S	T03-00118-5301	TP8100 Assembly Tool Kit	\$292.00
S	TOPA-SV-024	Terminals Calibration Box	\$235.00
S	T03-00118-0201	TP81/93/94 Calibration Adaptor	\$44.00
S	T03-00118-0202	TP81/93/94 Calibration Low Pass Filter	\$38.00

TP9400 IS

TP9400 P25 Intrinsically Safe Portable Radio

The L3Harris TP9400 may be the smallest P25 Phase 2-capable IS portable but it is uncompromising in meeting the demands of those serving our communities. With analog, 12.5 kHz P25 Phase 1 FDMA conventional/trunked and 6.25 kHz equivalent P25 Phase 2 TDMA trunked capability in a single device, you can transition to a more spectrally efficient solution in a time frame that suits you.

Each radio comes with the following hardware features as standard:

- GPS Display
- MDC1200 Encode/Decode
- P25 Trunked PSTN Dialling
- Two-Tone Decode
- Voice Annunciations



Step One (1 of 4) – Select a radio body [based on the frequency band, keypad type, and color] and an antenna.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – SYSTEM (16-Key)			
S	TP9461B1GA11	Portable, AEx IIA, TP9400,136-174M, Blue	\$1,323.00
S	TP9461B1GA21	Portable, AEx IIC, TP9400,136-174M, Blue	\$1,433.00

VHF Antenna Options

S	TPA-AN-034	Antenna, 136-174MHz, Hel	\$30.00
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UHF (380-470 MHz) – SYSTEM (16-Key)

S	TP9461HBGA11	Portable, AEx IIA, TP9400,380-470M, Blue	\$1,323.00
S	TP9461HBGA21	Portable, AEx IIC, TP9400,380-470M, Blue	\$1,433.00

UHF (380-470 MHz) – Antenna Options

S	TPA-AN-037	Antenna, 380-470MHz, 1/4 Wave Whip	\$22.00
S	TPA-AN-038	Antenna, 380-470MHz, Hel	\$22.00

700/800 (762-870 MHz) – SYSTEM (16-Key)

S	TP9461K5GA11	Portable, AEx IIA, TP9400,762-870M, Blue	\$1,323.00
S	TP9461K5GA21	Portable, AEx IIC, TP9400,762-870M, Blue	\$1,433.00

TP9400 IS

E/C	Model Number	Description	List Price
700/800 Antenna Options			
S	TPA-AN-022	Antenna, 762-870MHz, 1/2 Wave Whip	\$22.00

TP9400 IS

Step Two (2 of 4) – Select one battery and one charger			
E/C	Model Number	Description	List Price
Battery Options			
S	T03-22001-AAAA	Battery, AEx IIA, Li-Ion 2300mAh	\$210.00
S	T03-22001-AACA	Battery, AEx IIC, Li-Ion 2300mAh	\$210.00
S	TPA-CA-201	Belt Clip 55mm	\$11.00
Charger Options			
S	T03-22011-BABB	Charger, IS, Single, Li-Ion w/ plug pack	\$207.00
S	T03-22011-CABB	Charger, IS, Multi, Li-Ion w/ cable	\$995.00

TP9400 IS

Step Three (3 of 4) – Radio body above comes in standard Analog mode. If desired, select an operating mode and any additional add-on software feature options. Please refer to the notes in red to determine if there is a prerequisite for any of the software features below.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TPAS050	SFE - P25 CAI	\$265.00
S	TPAS055	SFE - P25 Trunking Phase 1 (TPAS050 Prerequisite)	\$700.00
S	TPAS091	SFE - P25 Trunking Phase 2 (TPAS055 Prerequisite)	\$265.00

Encryption – Software Features

S	TPAS109	SFE - Single Key AES, DES, ARC4 Enc	\$50.00
S	TPAS058	SFE - Multi Key AES Encryption	\$600.00
S	TPAS057	SFE - Multi Key DES Encryption (TPAS109 or TPAS058 Prerequisite)	\$250.00
S	TPAS143	SFE - P25 OTAR (TPAS058 Prerequisite)	\$350.00
S	TPAS145	SFE - Security Bundle (Includes AES and OTAR)	\$800.00

Data Enablers – Software Features

S	TPAS075	SFE - P25 OTAP (TPAS055 Prerequisite)	\$50.00
S	TPAS142	SFE - GPS Location Services (TPAS050 Prerequisite)	\$200.00
S	TPAS146	SFE - Data Bundle (Includes Location Services and OTAP)	\$300.00

System Administration Enablers – Software Features

S	TPAS051	SFE - P25 Administration Service (TPAS050 Prerequisite)	\$541.00
S	TPAS056	SFE - User IP Data (TPAS050 Prerequisite)	\$250.00
S	TPAS060	SFE - Tait Radio API	\$136.00

Radio Enhancement Enablers – Software Features

S	TPAS086	SFE - Enhanced Channel Capacity	\$84.00
S	TPAS083	SFE - 20/25khz Wideband Enable (Not available to US FCC-regulated customers)	\$0.01
S	TPAS100	SFE - Link Layer Authentication (For use with Motorola systems only)	\$100.00

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

TP9400 IS

Step Four (4 of 4) – Select any additional accessories desired			
E/C	Model Number	Description	List Price
Vehicle Charger Options			
S	T03-22011-DAAB	Charger, IS, Vehicle	\$430.00
Speaker Microphones			
S	T03-22008-AAAA	SpkrMic, IS, Storm, E-Button, 2.5mm IP68	\$247.00
S	T03-22008-DAAA	Skull Mic, IS	\$1,275.00
Audio Accessories - Headsets			
S	T03-22008-BAAA	Headset, IS, Heavy-Duty Overhead	\$811.00
S	T03-22008-BABA	Headset, IS, Heavy-Duty Behind-Head	\$811.00
Carrying Case - Leather			
S	T03-22007-0001	Case, IS, Hvy Duty Leather DStud B/Loop	\$66.00
S	T03-22007-0002	Case, IS, Hvy Duty Leather Sprng Clip	\$57.00
S	T03-22007-0003	Case, IS, Hvy Duty Leather Belt Loop	\$51.00
S	T03-22007-0004	Case Bat, IS, Hvy Duty Leather	\$42.00
S	T03-22007-0005	Case Bat, IS, Hvy Duty Leather DStud	\$56.00
S	T03-22007-0006	Case Bat, IS, Hvy Duty Leather Sprng Clip	\$48.00
S	T03-22007-0007	Case Bat, IS, Hvy Duty Leather B/Loop	\$43.00
S	TPA-CA-208	Belt Clip Adaptor for 55mm	\$16.00
Programming Kits			
S	T03-22009-AAAA	TP93/94 IS Programming Adptr	\$225.00

TP9400 IS

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TM9400

TM9400 P25 Mobile Radio



The L3Harris TM9400 has the means and flexibility to meet the operational needs of your organization today and tomorrow. The TM9400 provides analog, P25 Phase 1 conventional/trunked, 6.25 kHz equivalent P25 Phase 2 TDMA trunked, and LSM (CQPSK) decode capability in a single device.

Each radio comes with the following hardware features as standard:

- GPS Display
- MDC1200 Encode/Decode
- P25 Trunked PSTN Dialling
- Two-Tone Decode
- Multi-Head Support
- Voice Annunciations

Step One (1 of 5) – Pick one (1) radio body based on the frequency band, power, and connector.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – Low Power (25W)			
S	TM9400B1AA	Mobile, TM9400, 136-174M 25W, BNC, Alm	\$872.00
S	TM9400B1BA	Mobile, TM9400, 136-174M 25W, M-UHF, Alm	\$872.00

VHF (136-174 MHz) – High Power (50W)

S	TM9400B1CA	Mobile, TM9400, 136-174M 50W, BNC, Alm	\$1,050.00
S	TM9400B1DA	Mobile, TM9400, 136-174M 50W, M-UHF, Alm	\$1,050.00

UHF-L (400-470 MHz) – Low Power (25W)

S	TM9400H5AA	Mobile, TM9400, 400-470M 25W, BNC, Alm	\$872.00
S	TM9400H5BA	Mobile, TM9400, 400-470M 25W, M-UHF, Alm	\$872.00

UHF-L (400-470 MHz) – High Power (40W)

S	TM9400H5CA	Mobile, TM9400, 400-470M 40W, BNC, Alm	\$1,050.00
S	TM9400H5DA	Mobile, TM9400, 400-470M 40W, M-UHF, Alm	\$1,050.00

TM9400

E/C	Model Number	Description	List Price
UHF-H (450-520 MHz) – Low Power (25W)			
S	TM9400H7AA	Mobile, TM9400, 450-520M 25W, BNC, Alm	\$872.00
S	TM9400H7BA	Mobile, TM9400, 450-520M 25W, M-UHF, Alm	\$872.00
UHF-H (450-520 MHz) – High Power (40W)			
S	TM9400H7CA	Mobile, TM9400, 450-520M 40W, BNC, Alm	\$1,050.00
S	TM9400H7DA	Mobile, TM9400, 450-520M 40W, M-UHF, Alm	\$1,050.00
700/800 MHz (764-870 MHz) – High Power (35W)			
S	TM9400K5CA	Mobile, TM9400, 762-870M 35W, BNC, Alm	\$1,050.00
S	TM9400K5DA	Mobile, TM9400, 762-870M 35W, M-UHF, Alm	\$1,050.00

TM9400

Step Two (2 of 5) – Power Cable Install Kit Option. Select the power cable based on the power and connector selected above			
E/C	Model Number	Description	List Price
S	T02-00026-1001	Cable, Install Kit, BNC, 25W	\$37.00
S	T02-00026-1002	Cable, Install Kit, M-UHF, 25W	\$37.00
S	T02-00026-1003	Cable, Install Kit, BNC, 30-50W	\$67.00
S	T02-00026-1004	Cable, Install Kit, M-UHF, 30-50W	\$67.00

Step Three (3 of 5) – Control Head & Microphone Configuration Option. Select the option that best fits the configuration you desire and pick one (1) part from each table within that option.

E/C	Model Number	Description	List Price
Option 1: Fixed Head Operation – Control Heads			
S	T02-00071-AAAD	Ctrl Head, Fixed Primary, Blk	\$242.00
S	T02-00071-AABD	Ctrl Head, Fixed Primary, Yel	\$292.00
S	T02-00071-AAED	Ctrl Head, Fixed Primary, Grn	\$292.00

Option 1: Fixed Head Operation – Microphones			
S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00

Option 2: Single Remote Head Operation – Control Heads			
S	T02-00071-CAAD	Cntrl Head, Primary Rmt, Blk	\$384.00
S	T02-00071-CABD	Cntrl Head, Primary Rmt, Yel	\$434.00
S	T02-00071-CAED	Cntrl Head, Primary Rmt, Grn	\$434.00

Option 2: Single Remote Head Operation – Remote Cables			
S	T02-00061-3001	Single Remote Head Kit, 20ft	\$107.00
S	T02-00061-3002	Single Remote Head Kit, 40ft	\$289.00
S	T02-00061-3003	Single Remote Head Kit, 60ft	\$337.00

Option 2: Single Remote Head Operation - Microphones			
S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00

Option 3: Hand Held Control Head Operation – Control Heads			
S	T02-00063-1016	Ctrl Head, Primary Rmt, HHCH, Blk	\$364.00
S	T02-00063-1006	Ctrl Head, Primary Rmt, HHCH, Yel	\$414.00
S	T02-00063-1010	Ctrl Head, Primary Rmt, HHCH, Red	\$414.00
S	T02-00063-1014	Ctrl Head, Primary Rmt, HHCH, Grn	\$414.00

TM9400

E/C	Model Number	Description	List Price
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Option 3: Hand Held Control Head Operation – Remote Cables

S	T02-00009-0201	Cable, Curly Extension, HHCH 5ft	\$28.00
S	T02-00009-0202	Cable, Curly Extension, HHCH 10ft	\$38.00
S	T02-00009-0203	Cable, Curly Extension, HHCH 20ft	\$46.00
S	T02-00009-0204	Cable, Curly Extension, HHCH 30ft	\$79.00

Option 3: Hand Held Control Head Operation – External Speakers

S	T02-00004-0204	Speaker, External, 10W for 25W Radio	\$73.00
S	T02-00004-0205	Speaker, External, 10W for 30-50W Radio	\$73.00

Option 4: Dual Remote Head Operation – Primary Control Heads

S	T02-00071-CAAD	Cntrl Head, Primary Rmt, Blk	\$384.00
S	T02-00071-CABD	Cntrl Head, Primary Rmt, Yel	\$434.00
S	T02-00071-CAED	Cntrl Head, Primary Rmt, Grn	\$434.00

Option 4: Dual Remote Head Operation – Remote Cable

S	T02-00062-3001	Dual Remote Head Kit, 60ft	\$383.00
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Option 4: Dual Remote Head Operation – Primary Control Head Microphones

S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00

Option 4: Dual Remote Head Operation – Secondary Control Heads

S	T02-00071-DAAD	Ctrl Head, Secondary Rmt, Blk	\$384.00
S	T02-00071-DABD	Ctrl Head, Secondary Rmt, Yel	\$434.00
S	T02-00071-DAED	Ctrl Head, Secondary Rmt, Grn	\$434.00

Option 4: Dual Remote Head Operation – Secondary Control Head Microphones

S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00

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E/C	Model Number	Description	List Price
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Option 5: Desktop Configuration

Power Supply

S	T02-00036-AACA	Desktop Power Supply 13V8 23A DC	\$295.00
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Desktop Cradle Cable Kits

S	T02-00026-1001	Cable, Install Kit, BNC, 25W	\$37.00
S	T02-00026-1002	Cable, Install Kit, M-UHF, 25W	\$37.00
S	T02-00026-1003	Cable, Install Kit, BNC, 30-50W	\$67.00
S	T02-00026-1004	Cable, Install Kit, M-UHF, 30-50W	\$67.00

Desktop Power Supply Hardware Kits

S	T02-00026-3002	Install Kit, U-Cradle, Desktop Power	\$83.00
S	T02-00026-3001	Install Kit, Plinth, Desktop Power	\$83.00

Desktop Microphone

S	T02-00005-ACAA	Desktop Microphone	\$187.00
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Optional Mobile Cradle Mounting Hardware Kits

S	T02-00026-2001	Mounting Kit, U-Cradle	\$21.00
S	T02-00026-2002	Mounting Kit, Security Cradle	\$109.00
S	T02-00026-2004	Mounting Kit, Universal	\$75.00
S	T02-00026-2006	Mounting Kit, Dual	\$65.00

Optional UnifiedVehicle Upgrade Kits

UnifiedVehicle Upgrade Options

S	TU2000M0000000000A	Upgrade Kit UV Fixed Head No Cell NoAnt	\$522.00
S	TU2000M0000000000B	Upgrade Kit UV Remote Head No Cell NoAnt	\$381.00
S	TU2000M4000000000A	Upgrade Kit UV Fixed Head NACell x3Ant	\$884.00
S	TU2000M4000000000B	Upgrade Kit UV Remote Head NACell x3Ant	\$743.00

UnifiedVehicle External Antenna Options

S	T05-00031-0001	Antenna, UVe MultiElement Ext BNC Adptr	\$466.00
S	T05-00031-0002	Antenna, UVe MultiElement Ext MUHF Adptr	\$466.00
S	T05-00031-0003	Antenna, UVe MultiElement Ext (No Adptr)	\$466.00
S	T05-00031-0004	Antenna, UVe WiFi 2.4/5GHz Ext SMA	\$111.00

TM9400

Step Four (4 of 5) – Radio body above comes in standard Analog mode. If desired, pick an operating mode and any additional add on software feature options. Please refer to the notes in red to determine if there is a prerequisite for any of the software features below.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TMAS050	SFE - P25 Common Air Interface (CAI)	\$265.00
S	TMAS055	SFE - P25 Trunking Phase 1 (TMAS050 Prerequisite)	\$700.00
S	TMAS091	SFE - P25 Trunking Phase 2 (TMAS055 Prerequisite)	\$265.00

Encryption Enablers – Software Features

S	TMAS109	SFE - Single Key AES, DES, ARC4 Enc	\$50.00
S	TMAS058	SFE - Multi Key AES Encryption	\$600.00
S	TMAS057	SFE - Multi Key DES Encryption (TMAS109 or TMAS058 Prerequisite)	\$250.00
S	TMAS143	SFE - P25 OTAR (TMAS058 Prerequisite)	\$350.00
S	TMAS145	SFE - Security Bundle (Includes AES, OTAR)	\$800.00

Data Enablers – Software Features

S	TMAS105	SFE - Geofencing Services	\$156.00
S	TMAS075	SFE - P25 OTAP (TMAS055 Prerequisite)	\$50.00
S	TMAS142	SFE - GPS Location Services (TMAS050 Prerequisite)	\$200.00
S	TMAS146	SFE Key - Data Bundle (Includes Location Services, OTAP) (TMAS050/55 Prerequisite)	\$300.00

System Administration Enablers – Software Features

S	TMAS051	SFE - P25 Administration Service (TMAS050 Prerequisite)	\$541.00
S	TMAS056	SFE - User IP Data (TMAS050 Prerequisite)	\$250.00
S	TMAS060	SFE - Tait Radio API	\$136.00

Radio Enhancement Enablers – Software Features

S	TMAS086	SFE - Enhanced Channel Capacity	\$84.00
S	TMAS083	SFE - 20/25khz Wideband Enable (Not available to US FCC-regulated customers)	\$0.01
S	TMAS100	SFE - Link Layer Authentication (TMAS055 Prerequisite. For use with Motorola systems only)	\$100.00

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

Step Five (5 of 5) – Mobile Accessories. Select any additional accessories desired.

E/C	Model Number	Description	List Price
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Accessories – Microphones and Speakers

S	T02-00005-ADAA	Handsfree Microphone	\$116.00
S	T02-00004-0101	Telephone Handset	\$651.00
S	T02-00004-0204	Speaker, External, 10W for 25W Radio	\$73.00
S	T02-00004-0205	Speaker, External, 10W for 30-50W Radio	\$73.00
S	T02-00004-0201	Speaker, Horn, 112dB SPL for 25W Radio	\$185.00
S	T02-00004-0202	Speaker, Horn, 112dB SPL for 30-50W Radio	\$185.00

Accessories – Cables

S	T02-00009-0101	Cable Shielded 8 Core RJ45 Grommet 2ft	\$21.00
S	T02-00009-0102	Cable Shielded 8 Core RJ45 Grommet 5ft	\$26.00
S	T02-00009-0103	Cable Shielded 8 Core RJ45 Grommet 20ft	\$46.00
S	T02-00009-0104	Cable Shielded 8 Core RJ45 Grommet 40ft	\$94.00
S	T02-00009-0105	Cable Shielded 8 Core RJ45 Grommet 10ft	\$39.00
S	T02-00063-2001	HHCH Cables & Interface Box Kit	\$395.00
S	T02-00034-EAAA	Cable Ignition Sense 13ft	\$54.00
S	TMAA10-10	Remote PTT + Microphone for HHCH B-Box	\$174.00

Accessories – GPS Receivers and Accessories**RF Antenna is not included. Please purchase as a separate item.**

S	TMAA05-01	GPS Receiver Garmin Flush Mount	\$383.00
S	TMAA05-02	Magnetic Mount Kit For TMAA05-01	\$41.00
S	TMAA05-03	Plate Mount Kit For TMAA05-01	\$20.00
S	TMAA05-04	GPS Receiver Garmin Magnetic Mount	\$419.00
S	TMAA05-05	GPS Receiver PCTEL Magnetic Mount	\$304.00
S	TMAA05-06	GPS Receiver PCTEL Through Hole Mount	\$314.00

Programming & Service Kits

S	T02-00031-0002	P25 Programming & Calibration Kit	\$450.00
S	T02-00031-0007	TM93/94 Service Kit	\$615.00
S	TOPA-SV-024	Terminals Calibration Box	\$235.00
S	T03-00118-0601	USB to RJ11 Programming Cable	\$120.00
S	TMAA20-02	Adaptor RJ45 to DB9 Adaptor	\$30.00
S	TMAA20-03	Cable 25W Radio Pwr to Banana Plug	\$59.00
S	TMAA20-04	Adaptor RJ12 Socket/RJ45 Plug	\$27.00
S	TMAA21-01	Cable DB15 Socket/RJ45 Plug	\$116.00

TB9400

TB9400 P25 Base Stations

The L3Harris TB9400 base station is a second generation P25 base station with IP connectivity. It supports three modes of operation: **Analog, P25 Conventional and Trunking. P25 Trunking Phase 1 to Phase 2** software migration enables customers to transition to a more spectrally efficient solution with greater capacity while future-proofing their investment.

The TB9400 delivers on deployment and operational efficiency with Phase 2 upgradability, Linear Simulcast Modulation (LSM), and remote network management.

The TB9400 base station is the main component of the AS-IP Analog Simulcast over IP network. It is an ideal platform to migrate to P25 Conventional or Trunking in the future from Analog. Each TB9400 comes default with analog air interface software.



The TB9400 offers the following features:

- P25 Phase 1 trunked base station with TDMA hardware and software-upgradability to P25 Phase 2 TDMA for increased capacity
- P25 Conventional and Analog simulcast AS-IP operation, simulcast or no simulcast mode
- P25 standards compliance for greater choice and interoperability
- Analog conventional simulcast operation
- IP connectivity allows efficient network design and scaling
- Linear simulcast modulation (LSM) means simulcast networks with fewer sites thanks to the linear PA
- Extensive remote management and monitoring operations with a focus on security
- MIL-STD designed and tested for reliability to mitigate network outages

Frequency	50W	100W	Rx Only
148-174MHz	✓	✓	✓
378-420MHz	✓	✓	✓
400-440MHz	✓	✓	✓
440-480MHz	✓	✓	✓
470-520MHz	✓	✓	✓
762-870MHz	✓	✓	✓

Note:

- DC power options are 12/24/48VDC with AUX output
- AC power options are 110/240VAC + AUX output
- ACDC power options are AC + 12/24/48VDC + AUX output
- AUX power output voltage options are 12VDC, 24VDC, or 48VDC AUX

Step One (1 of 5) – Select a chassis based on the channel RF Power required

E/C	Model Number	Description	List Price
50 Watt Single-Channel Chassis			
S	TB9415S-050H	Chassis, TB9400, Single, 50W	\$1,278.00
50 Watt Dual-Channel Chassis			
S	TB9415D-050H	Chassis, TB9400, Dual, 50W	\$1,278.00
100 Watt Single-Channel Chassis			
S	TB9435S-100H	Chassis, TB9400, Single, 100W	\$1,278.00

TB9400

E/C	Model Number	Description	List Price
Multi-Receiver Chassis			
S	TB9444-RX1H	Chassis, TB9400, Single Receiver x1	\$1,152.00
S	TB9444-RX2H	Chassis, TB9400, Multi Receiver x2	\$1,152.00
S	TB9444-RX3H	Chassis, TB9400, Multi Receiver x3	\$1,152.00
S	TB9444-RX4H	Chassis, TB9400, Multi Receiver x4	\$1,152.00

TB9400

Step Two (2 of 5) – Select Reciter and Power Amplifier based on the chassis selected above. Be sure to match the frequency band of the Reciter with that of the Power Amplifier.

E/C	Model Number	Description	List Price
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Option 1 – TB9400 Reciter for Single 50W Options

S	T01-01103-CAAA	Reciter, TB9400, 136-156MHz	\$2,581.00
S	T01-01103-DAAA	Reciter, TB9400, 148-174MHz	\$2,581.00
S	T01-01103-JAAA	Reciter, TB9400, 378-420MHz	\$2,581.00
S	T01-01103-KAAA	Reciter, TB9400, 400-440MHz	\$2,581.00
S	T01-01103-LAAA	Reciter, TB9400, 440-480MHz	\$2,581.00
S	T01-01103-MAAA	Reciter, TB9400, 470-520MHz	\$2,581.00
S	T01-01103-NAAA	Reciter, TB9400, 762-870MHz	\$2,581.00

Option 1 – TB9400 Power Amplifier for Single 50W Options

S	T01-01121-BABA	Linear Pwr Amp, TB9400, 136-174MHz, 50W	\$1,427.00
S	T01-01121-DABA	Linear Pwr Amp, TB9400, 148-174MHz, 50W	\$1,427.00
S	T01-01121-JAAA	Linear Pwr Amp, TB9400, 378-420MHz, 50W	\$1,427.00
S	T01-01121-KAAA	Linear Pwr Amp, TB9400, 400-440MHz, 50W	\$1,427.00
S	T01-01121-LAAA	Linear Pwr Amp, TB9400, 440-480MHz, 50W	\$1,427.00
S	T01-01121-MAAA	Linear Pwr Amp, TB9400, 470-520MHz, 50W	\$1,427.00
S	T01-01121-NAAA	Linear Pwr Amp, TB9400, 762-870MHz, 50W	\$1,427.00

Option 2 – TB9400 Reciter for Dual 50W Options

Select two (2) for dual configuration

S	T01-01103-CAAA	Reciter, TB9400, 136-156MHz	\$2,581.00
S	T01-01103-DAAA	Reciter, TB9400, 148-174MHz	\$2,581.00
S	T01-01103-JAAA	Reciter, TB9400, 378-420MHz	\$2,581.00
S	T01-01103-KAAA	Reciter, TB9400, 400-440MHz	\$2,581.00
S	T01-01103-LAAA	Reciter, TB9400, 440-480MHz	\$2,581.00
S	T01-01103-MAAA	Reciter, TB9400, 470-520MHz	\$2,581.00
S	T01-01103-NAAA	Reciter, TB9400, 762-870MHz	\$2,581.00

TB9400

E/C	Model Number	Description	List Price
S	T01-01121-BABA	Linear Pwr Amp, TB9400, 136-174MHz, 50W	\$1,427.00
S	T01-01121-DABA	Linear Pwr Amp, TB9400, 148-174MHz, 50W	\$1,427.00
S	T01-01121-JAAA	Linear Pwr Amp, TB9400, 378-420MHz, 50W	\$1,427.00
S	T01-01121-KAAA	Linear Pwr Amp, TB9400, 400-440MHz, 50W	\$1,427.00
S	T01-01121-LAAA	Linear Pwr Amp, TB9400, 440-480MHz, 50W	\$1,427.00
S	T01-01121-MAAA	Linear Pwr Amp, TB9400, 470-520MHz, 50W	\$1,427.00
S	T01-01121-NAAA	Linear Pwr Amp, TB9400, 762-870MHz, 50W	\$1,427.00

Option 3 – TB9400 Reciter for Single 100W Options

S	T01-01103-CAAA	Reciter, TB9400, 136-156MHz	\$2,581.00
S	T01-01103-DAAA	Reciter, TB9400, 148-174MHz	\$2,581.00
S	T01-01103-JAAA	Reciter, TB9400, 378-420MHz	\$2,581.00
S	T01-01103-KAAA	Reciter, TB9400, 400-440MHz	\$2,581.00
S	T01-01103-LAAA	Reciter, TB9400, 440-480MHz	\$2,581.00
S	T01-01103-MAAA	Reciter, TB9400, 470-520MHz	\$2,581.00
S	T01-01103-NAAA	Reciter, TB9400, 762-870MHz	\$2,581.00

Option 3 – TB9400 Power Amplifier for Single 100W Options

S	T01-01121-BBBA	Linear Pwr Amp, TB9400, 136-174MHz, 100W	\$2,039.00
S	T01-01121-DBBA	Linear Pwr Amp, TB9400, 148-174MHz, 100W	\$2,039.00
S	T01-01121-JBAA	Linear Pwr Amp, TB9400, 378-420MHz, 100W	\$2,039.00
S	T01-01121-KBAA	Linear Pwr Amp, TB9400, 400-440MHz, 100W	\$2,039.00
S	T01-01121-LBAA	Linear Pwr Amp, TB9400, 440-480MHz, 100W	\$2,039.00
S	T01-01121-MBAA	Linear Pwr Amp, TB9400, 470-520MHz, 100W	\$2,039.00
S	T01-01121-NBAA	Linear Pwr Amp, TB9400, 762-870MHz, 100W	\$2,039.00

TB9400

E/C	Model Number	Description	List Price
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Option 4 – TB9400 Receiver-Only Options

S	T01-01104-CAAA	RxOnly, TB9400, 136-156MHz	\$1,721.00
S	T01-01104-DAAA	RxOnly, TB9400, 148-174MHz	\$1,721.00
S	T01-01104-JAAA	RxOnly, TB9400, 378-420MHz	\$1,721.00
S	T01-01104-KAAA	RxOnly, TB9400, 400-470MHz	\$1,721.00
S	T01-01104-LAAA	RxOnly, TB9400, 440-480MHz	\$1,721.00
S	T01-01104-MAAA	RxOnly, TB9400, 470-520MHz	\$1,721.00
S	T01-01104-NAAA	RxOnly, TB9400, 762-870MHz	\$1,721.00

Step Three (3 of 5) – Select Power Management Unit (PMU) option based on power input needed

E/C	Model Number	Description	List Price
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Option 1 – DC PMU Options**12VDC**

S	TBA3001-1100	PMU, TB9000, 12VDC Aux12V	\$1,889.00
S	TBA3001-1200	PMU, TB9000, 12VDC Aux24V	\$1,889.00
S	TBA3001-1400	PMU, TB9000, 12VDC Aux48V	\$1,889.00

24VDC

S	TBA3002-2100	PMU, TB9000, 24VDC Aux12V	\$1,889.00
S	TBA3002-2200	PMU, TB9000, 24VDC Aux24V	\$1,889.00
S	TBA3002-2400	PMU, TB9000, 24VDC Aux48V	\$1,889.00

48VDC

S	TBA3004-4100	PMU, TB9000, 48VDC Aux12V	\$1,889.00
S	TBA3004-4200	PMU, TB9000, 48VDC Aux24V	\$1,889.00
S	TBA3004-4400	PMU, TB9000, 48VDC Aux48V	\$1,889.00

TB9400

E/C	Model Number	Description	List Price
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Option 2 – AC PMU Options			
S	TBA30A0-0100	PMU, TB9000, AC Aux12	\$1,889.00
S	TBA30A0-0200	PMU, TB9000, AC Aux24	\$1,889.00
S	TBA30A0-0400	PMU, TB9000, AC Aux48	\$1,889.00

Mains Power Cable			
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

Option 3: AC/DC PMU Options			
12VDC			
S	TBA30A1-1100	PMU, TB9000, 12VACDC Aux12V	\$2,501.00
S	TBA30A1-1200	PMU, TB9000, 12VACDC Aux24V	\$2,501.00
S	TBA30A1-1400	PMU, TB9000, 12VACDC Aux48V	\$2,501.00
24VDC			
S	TBA30A2-2100	PMU, TB9000, 24VACDC Aux12V	\$2,501.00
S	TBA30A2-2200	PMU, TB9000, 24VACDC Aux24V	\$2,501.00
S	TBA30A2-2400	PMU, TB9000, 24VACDC Aux48V	\$2,501.00

48VDC			
S	TBA30A4-4100	PMU, TB9000, 48VACDC Aux12V	\$2,501.00
S	TBA30A4-4200	PMU, TB9000, 48VACDC Aux24V	\$2,501.00
S	TBA30A4-4400	PMU, TB9000, 48VACDC Aux48V	\$2,501.00

Mains Power Cable			
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

Step Four (4 of 5) – Select Software Feature Enablers (SFEs) based on the configuration needed			
E/C	Model Number	Description	List Price
Option 1 – Analog and Voting with Simulcast (AS-IP) Enablers			
Analog FM Enabler Options			
S	TBAS060	SFE - Digital Fixed Station Interface	\$523.00
Voting and Simulcast Enablers			
This is needed if you are designing a simulcast system. At least one master site/central voter is required in simulcast designs.			
Master Site or Central Voter Site			
S	TBAS061	SFE - Central Voter	\$4,826.00
S	TBAS062	SFE - Simulcast Enable (TBAS061 Prerequisite)	\$4,730.00
Satellite Site			
S	TBAS071	SFE - IP Networking Satellite	\$761.00
S	TBAS062	SFE - Simulcast Enable (TBAS071 Prerequisite)	\$4,730.00
Voted Receive-Only Satellite Site			
S	TBAS071-R0	SFE - IP Networking Satellite	\$381.00

Note: If a Dual configuration has been selected in step 1 above, repeat this option to select second channel software.

Option 2 – P25 Conventional and Voting with Simulcast Enablers			
P25 Conventional Enabler Options			
S	TBAS050	SFE - P25 Common Air Interface (CAI)	\$6,450.00
S	TBAS050-R0	SFE - P25 Common Air Interface (CAI) Rx Only – (Applicable to only Receive-Only Stations)	\$3,225.00
S	TBAS060	SFE - Digital Fixed Station Interface	\$523.00
Voting and Simulcast Enablers			
This is needed if you are designing a simulcast system. At least one master site/central voter is required in simulcast designs.			
Master or Central Voter Site			
S	TBAS061	SFE - Central Voter (TBAS050 Prerequisite)	\$4,826.00
S	TBAS062	SFE - Simulcast Enable (TBAS061 Prerequisite)	\$4,730.00
S	TBAS065	SFE - P25 Linear Simulcast Modulation (LSM) Phase 1 (TBAS062 Prerequisite)	\$1,365.00
Satellite Site			
S	TBAS071	SFE - IP Networking Satellite (TBAS050 Prerequisite)	\$761.00
S	TBAS062	SFE - Simulcast Enable (TBAS071 Prerequisite)	\$4,730.00
S	TBAS065	SFE - P25 Linear Simulcast Modulation (LSM) Phase 1 (TBAS062 Prerequisite)	\$1,365.00
Voted Receive-Only Satellite Site			
S	TBAS071-R0	SFE - IP Networking Satellite (TBAS050-R0 Prerequisite)	\$381.00

Note: If a Dual configuration has been selected in step 1 above, repeat this option to select second channel software.

E/C	Model Number	Description	List Price
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Option 3 – P25 Trunking and Voting with Simulcast Enablers

Select one of the following trunking options below then move on to simulcast enablers if simulcast design is required.

Option 3A - P25 Trunking (Access) Enabler

Preferred choice for designs involving only (1) functional site (i.e. one simulcast cell or a single site)

S	TBAS050	SFE - P25 Common Air Interface (CAI)	\$6,450.00
S	TBAS070	SFE - P25 Trunking Operation (Access) (TBAS050 Prerequisite)	\$372.00
S	TBAS070-R0	SFE - P25 Access Trunking Operation Rx Only (TBAS050-R0 Prerequisite) (Applicable to Receive-Only stations)	\$186.00
Add-on Optional Features			
S	TBAS060	SFE - Digital Fixed Station Interface	\$523.00
S	TBAS063	SFE - Failsoft for P25 Trunking (TBAS070 Prerequisite)	\$508.00
S	TBAS066	SFE - P25 Trunking Phase 2 Operation (TBAS070 Prerequisite)	\$1,347.00
S	TBAS066-R0	SFE - P5 Trunking Phase 2 Operation Rx Only (TBAS070-R0 Prerequisite) (Applicable to Receive-Only stations)	\$673.00

Option 3B - P25 Trunking (Express6) Enabler

Preferred choice for designs involving up to six (6) functional sites. A single simulcast cell is considered one functional site.

S	TBAS050	SFE - P25 Common Air Interface (CAI)	\$6,450.00
S	TBAS072	SFE - P25 Trunking Operation (Express6) (TBAS050 Prerequisite)	\$1,862.00
S	TBAS072-R0	SFE - P25 Express6 Trunking Operation Rx Only (TBAS050-R0 Prerequisite) (Applicable to Receive-Only stations)	\$931.00
Add-on Optional Features			
S	TBAS060	SFE - Digital Fixed Station Interface	\$523.00
S	TBAS063	SFE - Failsoft for P25 Trunking (TBAS072 Prerequisite)	\$508.00
S	TBAS066	SFE - P25 Trunking Phase 2 Operation (TBAS072 Prerequisite)	\$1,347.00
S	TBAS066-R0	SFE - P5 Trunking Phase 2 Operation Rx Only (TBAS072-R0 Prerequisite) (Applicable to only Receive-Only stations)	\$673.00

Option 3C: P25 Trunking (Full) Enabler

Preferred choice for designs involving more than six (6) functional sites. A single simulcast cell is considered one functional site.

S	TBAS050	SFE - P25 Common Air Interface (CAI)	\$6,450.00
S	TBAS050-R0	SFE - P25 Common Air Interface (CAI) Rx Only – (Applicable to only Receive-Only stations)	\$3,225.00
S	TBAS056	SFE - P25 Trunking Operation (Full) (TBAS050 Prerequisite)	\$5,386.00
S	TBAS056-R0	SFE - P25 Trunking Operation Rx Only (TBAS050-R0 Prerequisite) (Applicable to Receive-Only stations)	\$2,693.00
Add-on Optional Features			
S	TBAS060	SFE - Digital Fixed Station Interface	\$523.00
S	TBAS063	SFE - Failsoft for P25 Trunking (TBAS056 Prerequisite)	\$508.00
S	TBAS066	SFE - P25 Trunking Phase 2 Operation (TBAS056 Prerequisite)	\$1,374.00

TB9400

E/C	Model Number	Description	List Price
S	TBAS066-R0	SFE - P5 Trunking Phase 2 Operation Rx Only (TBAS056-R0 Prerequisite) (Applicable to Receive-Only stations)	\$673.00

Voting and Simulcast Enablers

This is needed if you are designing a simulcast system. At least one master site/central voter is required in simulcast designs.

Master or Central Voter Site

S	TBAS061	SFE - Central Voter (TBAS050 Prerequisite)	\$4,826.00
S	TBAS062	SFE - Simulcast Enable (TBAS061 Prerequisite)	\$4,730.00
S	TBAS065	SFE - P25 Linear Simulcast Modulation (LSM) Phase 1 (TBAS062 Prerequisite)	\$1,365.00
S	TBAS069	SFE - P25 Simulcast Enable Phase 2 (TBAS062 & TBAS066 Prerequisite)	\$1,365.00

Satellite Site

S	TBAS071	SFE - IP Networking Satellite (TBAS050 Prerequisite)	\$761.00
S	TBAS062	SFE - Simulcast Enable (TBAS071 Prerequisite)	\$4,730.00
S	TBAS065	SFE - P25 Linear Simulcast Modulation (LSM) Phase 1 (TBAS062 Prerequisite)	\$1,365.00
S	TBAS069	SFE - P25 Simulcast Enable Phase 2 (TBAS062 & TBAS066 Prerequisite)	\$1,365.00

Voted Receive-Only Satellite Site

S	TBAS071-R0	SFE - IP Networking Satellite (TBAS050-R0 Prerequisite)	\$381.00
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Note:

If a Dual configuration has been selected in step 1 above, repeat this option to select second channel software.

If a Multi-Receiver configuration has been selected and you have different Receiver software setups, please repeat this option/step for as many different Receiver channel configurations required.

TB9400

Step Five (5 of 5) – Select any additional standalone accessories desired			
E/C	Model Number	Description	List Price
S	TBAA03-13	Auxiliary Support Bracket, TB8/9	\$35.00
S	TBAA03-16	Carrying Handles, TB8/9	\$43.00
S	T01-01150-0003	Upgrade Kit, Single Channel, TB9400	\$71.00

TB9100 Base Station – P25, ANALOG

- ▶ **Base Stations**
- ▶ **Options & Accessories**



TB9100

Intelligent • Flexible • High Performance

The TB9100 base station offers continuous duty cycle operation at full performance specifications within the complete temperature and altitude range.

With a flexible, modular design, practical features and value, the TB9100 raises the bar for APCO Project 25 (P25) base stations. It utilizes 28V FET technology for superior performance and reliability. The TB9100 operates both as a repeater and/or a line-connected base station.

What's more, it's even easier to use. Flexible operating and programming software with an intuitive user interface is at the heart of the TB9100, making it very integrator friendly and easily expandable.

Practical easy-to-use features coupled with impressive RF performance help make the TB9100 the best choice for your next generation P25 base station.



The TB9100 offers you the following features:

- ▶ 255 Channels with up to 4 CTCSS or 4 DCS tones per channel
- ▶ Full Remote Control and Diagnostics
- ▶ Choice of external interface configurations
- ▶ Programmable Operation
- ▶ Software Enabled Feature upgrade options
- ▶ Choice of single 5W, 50W or 100W configurations
- ▶ Seamless backup battery operation and charging with ACDC supply

Frequency	5W	50W	100W	5W Dual	5W + 50W Dual	50W Dual
136–156	◆ ●	◆ ●	◆	◆ ●	◆ ●	◆ ●
148–174	◆ ●	◆ ●	◆	◆ ●	◆ ●	◆ ●
380–420	◆ ●	◆ ●	◆	◆ ●	◆ ●	◆ ●
400–440	◆ ●	◆ ●	◆	◆ ●	◆ ●	◆ ●
440–480	◆ ●	◆ ●	◆	◆ ●	◆ ●	◆ ●
470–520	◆ ●	◆ ●	◆	◆ ●	◆ ●	◆ ●
762–869	◆ ●	◆ ●	◆	◆ ●	◆ ●	◆ ●

◆ = 28V PMU solution

● = 12VDC PA Only solution

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ DC power options are 12/24/48VDC with AUX output.
- ▶ AC power options are 110/240VAC + AUX output.
- ▶ ACDC power options are AC + 12/24/48VDC + AUX output.
- ▶ Auxiliary (AUX) power output voltage options are 12VDC, 24VDC or 48VDC AUX.
- ▶ Other options are available including Receive Only.
- ▶ With Receive Only you can have up to five receivers/reciters with a PMU or up to seven receivers/reciters without a PMU can be fitted in a rack.

Intelligent • Flexible • High Performance

Digital Controller Design

Designed from the ground up, the TB9100 features a state-of-the-art RISC processor and Digital Signal Processor (DSP), providing very fast, reliable data processing through the latest in digital technology.

28V Technology

More powerful than most base stations in its class. Tait tests the TB9100 to transmit continuously at full power with ambient air temperatures as high as +60°C (140°F) at 4572m (15,000 feet).

Advanced Programming Capabilities

The TB9100's intuitive yet comprehensive programming software with Graphical User Interface (GUI) lets you manage and program over 150 critical parameters, including all monitoring, configuration management and power management features.

Convenient Modular Design

Designed for ease of hook-up and adaptation in the field, the TB9100 is configured with front-loading modules that can be mixed and matched to meet your system needs. Whether expanding from 50 to 100 Watts, or replacing the PA, or creating a receive-only system, the TB9100 gives you the flexibility to make changes in the field. A clean back-panel design hides the usual rear unit wiring clutter displaying only the connections required to link to your external radio system.

Built-in Standard Interfaces

The TB9100 has built-in a variety of industry-standard interfaces to enable easy connectivity to the rest of your system. Whether adding a TB9100 to your network through its IP Ethernet, or attaching an analog base station or analog dispatch console through its 4-wire E&M audio line interface, you can connect to a TB9100 directly without additional hardware.

12V PA Version

The TB9100 is also available without a Power Management Unit. The PA system is based on a 12V PA that contains a 12 to 28 volt converter.

Self-Monitor Capability

The TB9100 manages self-monitoring parameters in its non-volatile memory, requiring no external costly monitor units, saving money, time and hassles. The advanced monitoring system will read the base status, determine the appropriate required action, and perform that action while alerting central control.

Power Management System

The comprehensive power management system provides the ability to automatically switch between AC and DC input power, to move to battery operation in the case of power failure, and to provide an auxiliary power supply for third-party equipment.

Complete Remote Accessibility

The advanced intuitive interface of the TB9100 Customer Service Software (CSS) makes remote management of your system simple. The self-monitoring application has dial-out capability so you are immediately notified of potential issues. Over 150 system parameters can be configured or monitored remotely with the TB9100 Customer Service Software.

Robust Specifications

Built to exceed standard specifications, the TB9100 is designed to withstand extreme temperature conditions. Engineered for maximum reliability, the TB9100 has large heat sinks, advanced cooling, and the intelligence to maintain the highest possible levels of service in adverse environments.

Peak RF Performance

With outstanding specifications for selectivity, adjacent channel interference and fast key-up times, the TB9100 base station was designed using the best RF practices. You can depend on the RF performance of this base station even in the most extreme temperature conditions.

Export Control Note

For Digital P25 products which are capable of encryption.

Products capable of utilizing high level encryption such as AES or DES-OFB (based on TDES) are classified as strategic goods and export/delivery is subject to controls of the New Zealand Ministry of Foreign Affairs and Trade.

High-level encryption is defined as exceeding 56 bits of key length.

For products supplied to Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea South, Luxembourg, Norway, Poland, Portugal, Russia, Slovenia, South Africa, Spain, Sweden, Switzerland, The Netherlands, Ukraine, United Kingdom or The United States, and which stay within that country, the following information needs to be supplied at time of order:

- ▶ Intermediate Destinations (sales organizations, dealers, customer distribution center)
 - Business / Agency Name
 - Address
- ▶ Ultimate Destination (must be within the same country)
 - Business / Agency Name
 - Address
 - Contact Person Name

For products supplied to any other country: At time of order an end-user certificate needs to be completed and following information needs to be supplied:

- ▶ Intermediate Destinations (sales organizations, dealers, customer distribution center)
 - Business / Agency Name
 - Address
 - Contact Person Name
- ▶ Ultimate Destination
 - Business / Agency Name
 - Address
 - Contact Person Name
 - Intended use of equipment
 - All countries where the equipment will be used

If the product is to be shipped outside the country of shipment, individual export licenses are still required as well as signed end-user certificates. Please be advised that an individual export license can take approximately 2-8 weeks to be processed.

Products not capable of high-level encryption are not subject to export controls.

Additional note that must be included on the invoice and shipping papers:

"This product is subject to New Zealand export controls. An express prior written authorization of the Government of New Zealand is required for re-export, re-sell, or otherwise disposal of the equipment or any part of the equipment."

P25 Base Station Configurations

Use the options below to complete the TB9100 Base Station item codes shown on pages 5.1-16 to 5.1-20. For more configuration options, please refer to the TB9100 Base Station configuration table on page 5.1-16.

For Example:

Replace characters in the item code to reflect the chosen options.

Single Base Station	TB9115FFHX0000YZ00
Dual Base Station	TB9115FFDXFFDXYZ00

Where:

Frequency Options (FF):

B2 = 136-156MHz

B3 = 148-174MHz

H1 = 400-440MHz

H2 = 440-480MHz

H3 = 470-520MHz

H4 = 380-420MHz

K4 = 794-824 & 762-870MHz

L2 = 852-930MHz

To order:

- ▶ replace FF with the required frequency code
- ▶ dual reciter systems require a code for each reciter
- ▶ for a dual system with 1x5W and 1x50W reciter:
 - the first FF code is for the 5W reciter
 - the second FF code is for the 50W reciter

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ K4 frequency coverage is - Transmit: 762-776MHz & 850-870MHz - Receive: 794-824MHz
- ▶ Standard base stations transport encrypted speech, and are not subject to encryption-related export restrictions.
- ▶ Dispatcher Encryption Capable base stations additionally support de/encryption on analog and digital dispatcher interfaces. These base stations are subject to encryption-related export control. Please refer to page 5.1-14.
- ▶ Important: Standard base stations can never be upgraded to Dispatcher Encryption Capable.

Software Options:

Please note that additional configuration cost will apply for digital operation options, such as TBAS050 CAI and other options. See page 5.1-23 for software options.

Where:

Dispatcher Encryption Options (X):

P = Conventional

E = Encrypted

T = Trunking

To order:

- ▶ replace X with the required option

Where:

PMU Options (Y):

Y = AC, DC or ACDC PMU

To order:

- ▶ replace Y with the required option. Please choose the PMU from the TB9100 Base Station configuration table on page 5.1-16

Where:

Power cord Options (Z):

Z = AC or ACDC PMU, power cord is required

= DC PMU, a power cord is not required

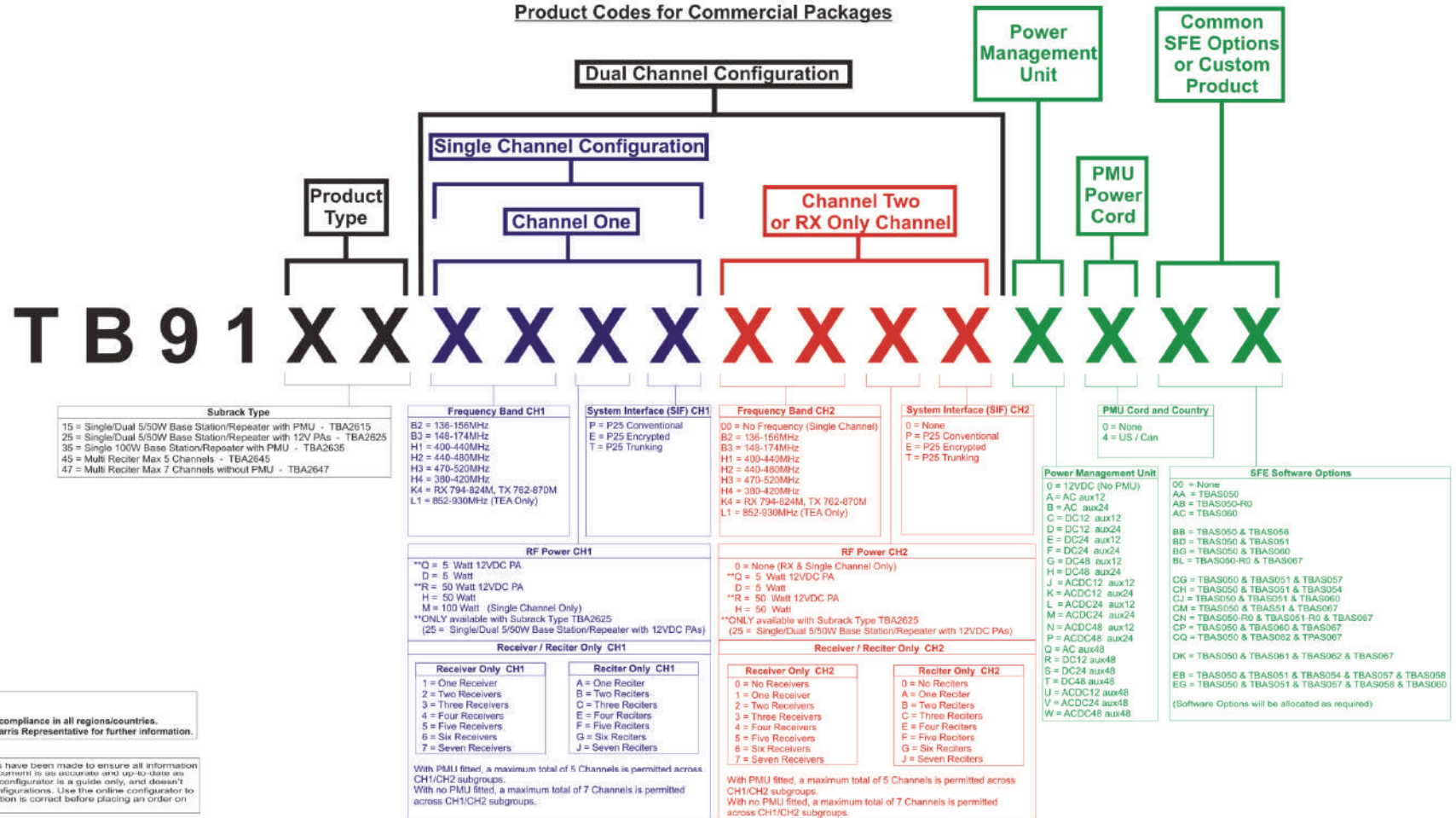
To order:

- ▶ replace Z with the required option. Please choose the power cord from the TB9100 Base Station configuration table on page 5.1-16

TB9100

Product Codes for Commercial Packages

Edition: 07



Example of: TB9115H1HPB2DPJ400

Product Type

TB91 = Default Items for TB9100
15 = Bstr/Rptr, Single/Dual 5/50W

Channel One

H1 = Frequency Band 400-440MHz
H1 = RF Power 50 Watts
P = SIF P25 Conventional

Channel Two

B2 = Frequency Band 136-156MHz
D = RF Power 5 Watts
P = SIF P25 Conventional

Power Management Unit, SFE Options or Custom Product

J = PMU ACDC12V and Aux 12V
4 = Power Cord US/CAN
00 = Software Keys No SFE Keys



01 September 2016

Doc ID: 2984

Base Station - Single with PMU

Standard Package Includes:

- ▶ Subrack including front panel with dual fans
- ▶ Control panel
- ▶ Power Management Unit (PMU) options as selected
- ▶ Power Amplifier (PA)
- ▶ P25 reciter (receiver/exciter)
- ▶ Crossover and audio cables
- ▶ CD with service software and product documentation



Options:

- ▶ Frequency: Choose the frequency ("FF" value) from the TB9100 Base Station configuration table on page 5.1-16
- ▶ System Interface (SIF): Choose the SIF ("X" value) from the TB9100 Base station configuration table on page 5.1-16
- ▶ PMU
 - AC = Input of 110/240VAC with AUX output. DC = Input of 12/24/48VDC with AUX output
 - ACDC = Inputs of 110/240VAC + 12/24/48VDC with AUX output
 - Auxiliary (AUX) power output voltage options are 12VDC, 24VDC or 48VDC AUX.
 - Other PMU options are also available, please refer to pages 5.1-35 to 5.1-38
 - Choose the PMU from the TB9100 Base Station configuration table on page 5.1-16
- ▶ Power Cord: Choose the Power Cord from the TB9100 Base Station configuration table on page 5.1-16. Please note that for the DC PMU option, a power cord is not required.
- ▶ Multi-reciter configurations are also available. Up to five receivers/reciters with PMU can be fitted in a rack or up to seven receivers/reciters without PMU can be fitted in a rack.
- ▶ For more configuration options, please refer to the TB9100 Base Station configuration table on page 5.1-16 and Software feature enhancement options are available on page 5.1-23. Additional configuration costs may apply

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.

Frequency Code	Frequency Band	TB9115 Single/Dual 5/50W with PMU	TB9125 Single/Dual 5/50W with 12V PA	TB9135 Single 100W with PMU	TB9145 Multi Reciter Max 5 channels	TB9147 Multi Reciter Max 7 channels without PMU
B2	136–156MHz	✓	✓	✓	✓	✓
B3	148-174MHz	✓	✓	✓	✓	✓
H1	400-440MHz	✓	✓	✓	✓	✓
H2	440-480MHz	✓	✓	✓	✓	✓
H3	470-520MHz	✓	✓	✓	✓	✓
H4	380-420MHz	✓	✓	✓	✓	✓
K4	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓
L2	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓

Base Station - Dual with PMU

Standard Package Includes:

- ▶ Subrack including front panel with dual fans
- ▶ Control panel
- ▶ Power Management Unit (PMU) options as selected
- ▶ Power Amplifier (PA)
- ▶ P25 reciter (receiver/exciter)
- ▶ Crossover and audio cables
- ▶ CD with service software and product documentation



Options:

- ▶ Frequency: Choose the frequency from the TB9100 Base Station configuration table on page 5.1-16
- ▶ System Interface (SIF): Choose the SIF from the TB9100 Base Station configuration table on page 5.1-16
- ▶ PMU:
 - AC = Input of 110/240VAC with AUX output DC = Input of 12/24/48VDC with AUX output
 - ACDC = Inputs of 110/240VAC + 12/24/48VDC with AUX output
 - Auxiliary (AUX) power output voltage options are 12VDC, 24VDC or 48VDC AUX.
 - Other PMU options are also available, please refer to page 5.1-35 to 5.1-38
 - Choose the PMU from the TB9100 Base Station configuration table on page 5.1-16
- ▶ Power Cord: Choose the Power Cord from the TB9100 Base Station configuration table on page 5.1-16. Please note that for the DC PMU option, a power cord is not required.
- ▶ Multi-reciter configurations are also available. Up to five receivers/reciters with PMU can be fitted in a rack or up to seven receivers/reciters without PMU can be fitted in a rack.
- ▶ For more configuration options, please refer to the TB9100 Base Station configuration table on page 5.1-15 and Software feature enhancement options are available on page 5.1-23. Additional configuration costs may apply

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.

Frequency Code	Frequency Band	TB9115 Single/Dual 5/50W with PMU	TB9125 Single/Dual 5/50W with 12V PA	TB9135 Single 100W with PMU	TB9145 Multi Reciter Max 5 channels	TB9147 Multi Reciter Max 7 channels without PMU
B2	136–156MHz	✓	✓	✓	✓	✓
B3	148-174MHz	✓	✓	✓	✓	✓
H1	400-440MHz	✓	✓	✓	✓	✓
H2	440-480MHz	✓	✓	✓	✓	✓
H3	470-520MHz	✓	✓	✓	✓	✓
H4	380-420MHz	✓	✓	✓	✓	✓
K4	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓
L2	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓

TB9100

Base Station - Single with 12VDC PA, no PMU

Standard Package Includes:

- ▶ Subrack including front panel with PA fan
- ▶ Control panel
- ▶ Power Amplifier (PA)
 - The 12VDC PA contains a 12 to 28 volt converter
- ▶ P25 reciter (receiver/exciter) with system interface
- ▶ Crossover and audio cables
- ▶ CD with service software and product documentation



Options:

- ▶ Frequency: Choose the frequency from the TB9100 Base Station configuration table on page 5.1-16
- ▶ System Interface (SIF): Choose the SIF from the TB9100 Base Station configuration table on page 5.1-16
- ▶ Multi-reciter configurations are also available. Up to seven receivers/reciters without PMU can be fitted in a rack.
- ▶ For more configuration options, please refer to the TB9100 Base Station configuration table on page 5.1-16 and Software feature enhancement options are available on page 5.1-23. Additional configuration costs may apply

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.

Frequency Code	Frequency Band	TB9115 Single/Dual 5/50W with PMU	TB9125 Single/Dual 5/50W with 12V PA	TB9135 Single 100W with PMU	TB9145 Multi Reciter Max 5 channels	TB9147 Multi Reciter Max 7 channels without PMU
B2	136–156MHz	✓	✓	✓	✓	✓
B3	148-174MHz	✓	✓	✓	✓	✓
H1	400-440MHz	✓	✓	✓	✓	✓
H2	440-480MHz	✓	✓	✓	✓	✓
H3	470-520MHz	✓	✓	✓	✓	✓
H4	380-420MHz	✓	✓	✓	✓	✓
K4	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓
L2	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓

Base Station - Single Receive only

Standard Package Includes:

- ▶ Subrack including front panel with PMU fan
- ▶ Control panel
- ▶ Power Management Unit (PMU) options as selected
- ▶ P25 reciter (receive only)
- ▶ Crossover and audio cables
- ▶ CD with service software and product documentation



Options:

- ▶ Frequency: Choose the frequency from the TB9100 Base Station configuration table on page 5.1-16
- ▶ System Interface (SIF): Choose the SIF from the TB9100 Base Station configuration table on page 5.1-16
- ▶ PMU:
 - AC = Input of 110/240VAC with AUX output. DC = Input of 12/24/48VDC with AUX output
 - ACDC = Inputs of 110/240VAC + 12/24/48VDC with AUX output
 - Auxiliary (AUX) power output voltage options are 12VDC, 24VDC or 48VDC AUX.
 - Other PMU options are also available, please refer to page 5.1-35 to 5.1-38
 - Choose the PMU from the TB9100 Base Station configuration table on page 5.1-16
- ▶ Power Cord: Choose the Power Cord from the TB9100 Base Station configuration table on page 5.1-16. Please note that for the DC PMU option, a power cord is not required.
- ▶ Multi-reciter configurations are also available. Up to five receivers/reciters with PMU can be fitted in a rack or up to seven receivers/reciters without PMU can be fitted in a rack.
- ▶ For more configuration options, please refer to the TB9100 Base Station configuration table on page 5.1-16 and Software feature enhancement options for Receive Only systems are available on page 5.1-23 including specific SFE codes. Additional configuration costs may apply

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.

Frequency Code	Frequency Band	TB9115 Single/Dual 5/50W with PMU	TB9125 Single/Dual 5/50W with 12V PA	TB9135 Single 100W with PMU	TB9145 Multi Reciter Max 5 channels	TB9147 Multi Reciter Max 7 channels without PMU
B2	136–156MHz	✓	✓	✓	✓	✓
B3	148–174MHz	✓	✓	✓	✓	✓
H1	400–440MHz	✓	✓	✓	✓	✓
H2	440–480MHz	✓	✓	✓	✓	✓
H3	470–520MHz	✓	✓	✓	✓	✓
H4	380–420MHz	✓	✓	✓	✓	✓
K4	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓
L2	RX 896-902MHz TX 927-941MHz	✓	✓	✓	✓	✓

Base Station - Transportable Repeater

Overview:

- ▶ The high performance TB9100 can now be packaged into a rugged, lightweight Pelican case.

Standard Package Includes:

- ▶ Repeater
- ▶ Built-in 5-40W output power
- ▶ Ruggedized briefcase (IP67) available in multiple colors
- ▶ Internal duplexer
- ▶ External antenna via N-type female RF connector
- ▶ Waterproof DC input connector
- ▶ Channel change button
- ▶ 700/80MHz versions include a built-in, high-stability frequency reference



Options:

- ▶ Frequency: Choose the frequency ("FF" value) from the TB9100 Transportable Base Station configuration table on page 5.1-22
- ▶ PMU:
 - AC = Input of 110/240VAC with AUX output
 - DC = Input of 12/24/48VDC with AUX output
 - ACDC = Inputs of 110/240VAC + 12/24/48VDC with AUX output
 - Auxiliary (AUX) power output voltage options are 12VDC, 24VDC or 48VDC AUX.
 - Other PMU options are also available, please refer to page 5.1-35 to 5.1-38
 - Choose the PMU ("Y" value) from the TB9100 Transportable Base Station configuration table on page 5.1-22
- ▶ Power Cord: Choose the Power Cord ("Z" value) from the TB9100 Transportable Base Station configuration table on page 5.1-22. Please note that for the DC PMU option, a power cord is not required.

Note:

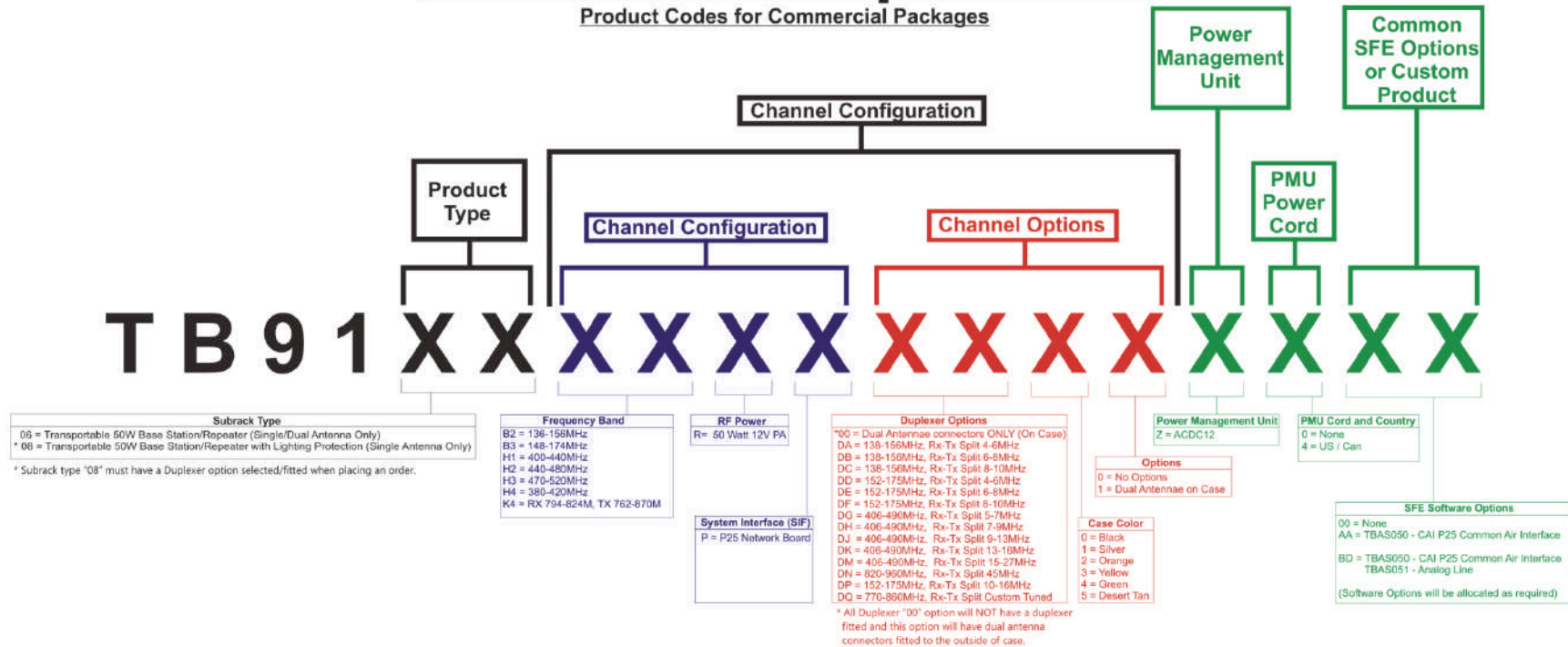
- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ Additional configuration costs may apply
- ▶ Please contact your customer support representative for duplexer channel spacing options ("XX" value)
- ▶ For more configuration options, please refer to the TB9100 Transportable Base Station configuration table on page 5.1-22.

Frequency Code	Frequency Band	TB9106 Single/Dual 5/50W 12V PA without Lightning Arrestor	TB9108 Single Antenna Only 5/50W 12V PA with Lightning Arrestor
B2	136-156MHz	✓	✓
B3	148-174MHz	✓	✓
H1	400-440MHz	✓	✓
H2	440-480MHz	✓	✓
H3	470-520MHz	✓	✓
H4	380-420MHz	✓	✓
K4	RX 896-902MHz TX 927-941MHz	✓	✓

TB9100 Transportable

Edition: 07

Product Codes for Commercial Packages



Example of: TB9106H1RPDG00Z400

Product Type
 TB91 =
 06 = Transportable, Single 50W with 12VPA

Channel
 H1 = Frequency Band 400-440MHz
 R = RF Power 50 Watts 12V
 P = SIF P25 Network Board

Channel Options
 DG = Duplexer Option 406-520MHz
 0 = Case Color Black
 0 = Options No Options

Power Management Unit and SFE Options
 Z = PMU AC/DC12V
 4 = Power Cord US/CAN
 00 = Software Options No Options



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Software Options

Note:

- ▶ A TB9100 includes the CSS (Customer Service Software), but to activate it for the first time, a TBAKEY01 must be ordered. The TBAKEY01 is a multiseat license key which allows customers to install their CSS on as many computers as they wish.

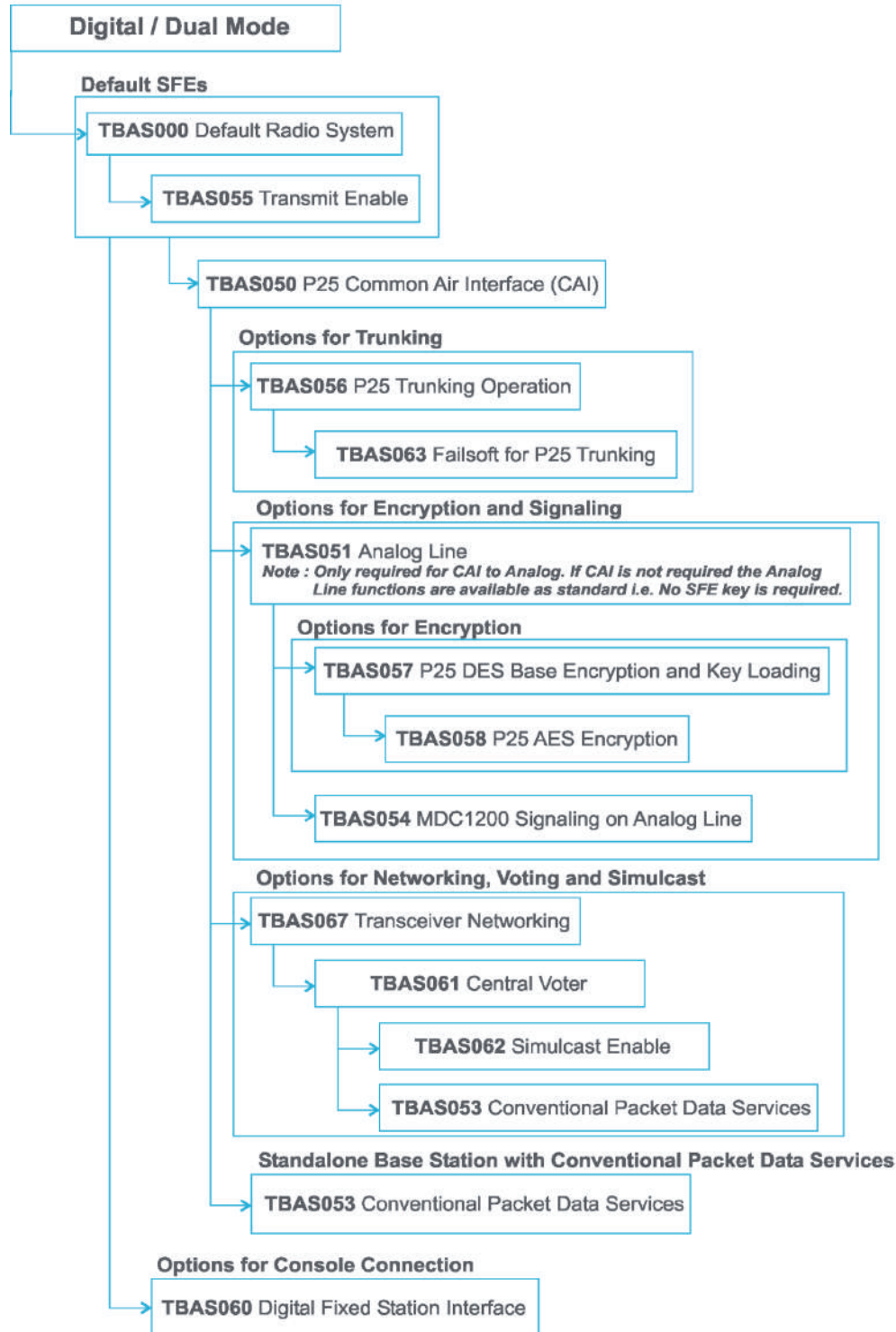
ITEM CODE	DESCRIPTION
TBAKEY01	TB9100 Software License Installer
TBAS050	SFE Key - P25 Common Air Interface (CAI) (TB91/94)
TBAS051	SFE Key - Analog Line (TB91)
TBAS053	SFE Key - Conventional Packet Data Services (91)
TBAS054	SFE Key - MDC1200 Signalling on Analog Line (TB91)
TBAS055	SFE Key - Transmit Enable (TB91)
Note: Enables the transmitter in a reciter initially configured as receiver only. Additional payment may be required if SFEs have been activated on the receive only reciter.	
TBAS056	SFE Key - P25 Trunking Operation (TB91/94)
Note: Please contact your L3Harris customer support representative if uplink voting/simulcast is required in a trunking situation.	
TBAS057	SFE Key - P25 Base Encryption & Key Loading (TB91)
Note: Enables DES encryption/decryption on the analog line. Requires TBAS051 (applicable to TB9100 reciter when built as dispatcher encryption capable. Included as standard on console gateway).	
TBAS058	SFE Key - P25 AES Encryption (TB91)
Note: Enables AES encryption/decryption on the analog line. Requires TBAS051 & TBAS057 (applicable to TB9100 reciter when built as dispatcher encryption capable. Included as standard on console gateway)	
TBAS060	SFE Key - Digital Fixed Station Interface (TB91)
Note: One SFE per channel group, adding a second SFE in the channel group for redundancy is recommended.	
TBAS061	SFE Key - Central Voter (TB91)
Note: One SFE per Base Station is required for Simulcast Networks.	
TBAS062	SFE Key - Simulcast Enable (TB91/94)
TBAS063	SFE Key - Failsoft for P25 Trunking (TB91/94)
TBAS067	SFE Key - Transceiver Networking (TB91/94)
TBAS083	SFE Key - 20/25khz Unrestricted Wideband (81/82/91)
RECEIVE ONLY	
TBAS050-R0	SFE Key - P25 Common Air Interface (CAI) Rx Only (TB91/94)
TBAS051-R0	SFE Key - Analog Line Rx Only (TB91)
TBAS054-R0	SFE Key - MDC1200 Signalling on Analog Line Rx Only (TB91)
TBAS056-R0	SFE Key - P25 Trunking Operation Rx Only (TB91/94)
Note: Please contact your L3Harris customer support representative if uplink voting/simulcast is required in a trunking situation.	
TBAS057-R0	SFE Key - P25 Base Encryption & Key Loading Rx Only (TB91)
Note: Enables DES encryption/decryption on the analog line. Requires TBAS051 (applicable to TB9100 reciter when built as dispatcher encryption capable. Included as standard on console gateway)	
TBAS058-R0	SFE Key - P25 AES Encryption Rx Only(TB91)
Note: Enables AES encryption/decryption on the analog line. Requires TBAS051 & TBAS057 (applicable to TB9100 reciter when built as dispatcher encryption capable. Included as standard on console gateway))	
TBAS060-R0	SFE Key - Digital Fixed Station Interface Rx Only (TB91)
Note: One SFE per channel group, adding a second SFE in the channel group for redundancy is recommended..	
TBAS061-R0	SFE Key - Central Voter Rx Only (TB91)
Note: One SFE per Base Station is required for Simulcast Networks.	

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – Please contact your L3Harris Representative for further details

Software Licences - Digital / Dual Mode

All software enhancements are enabled on a per feature per reciter basis.

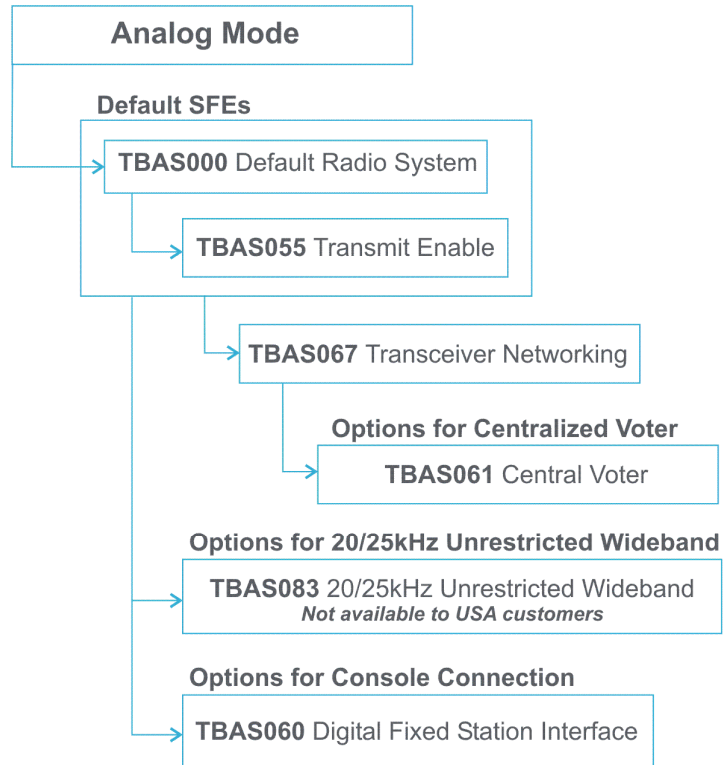
P25 Simulcast and Trunking infrastructure operate only in digital mode and do not support analog FM operation.



Software Licences - Analog Mode

All software enhancements are enabled on a per feature per reciter basis.

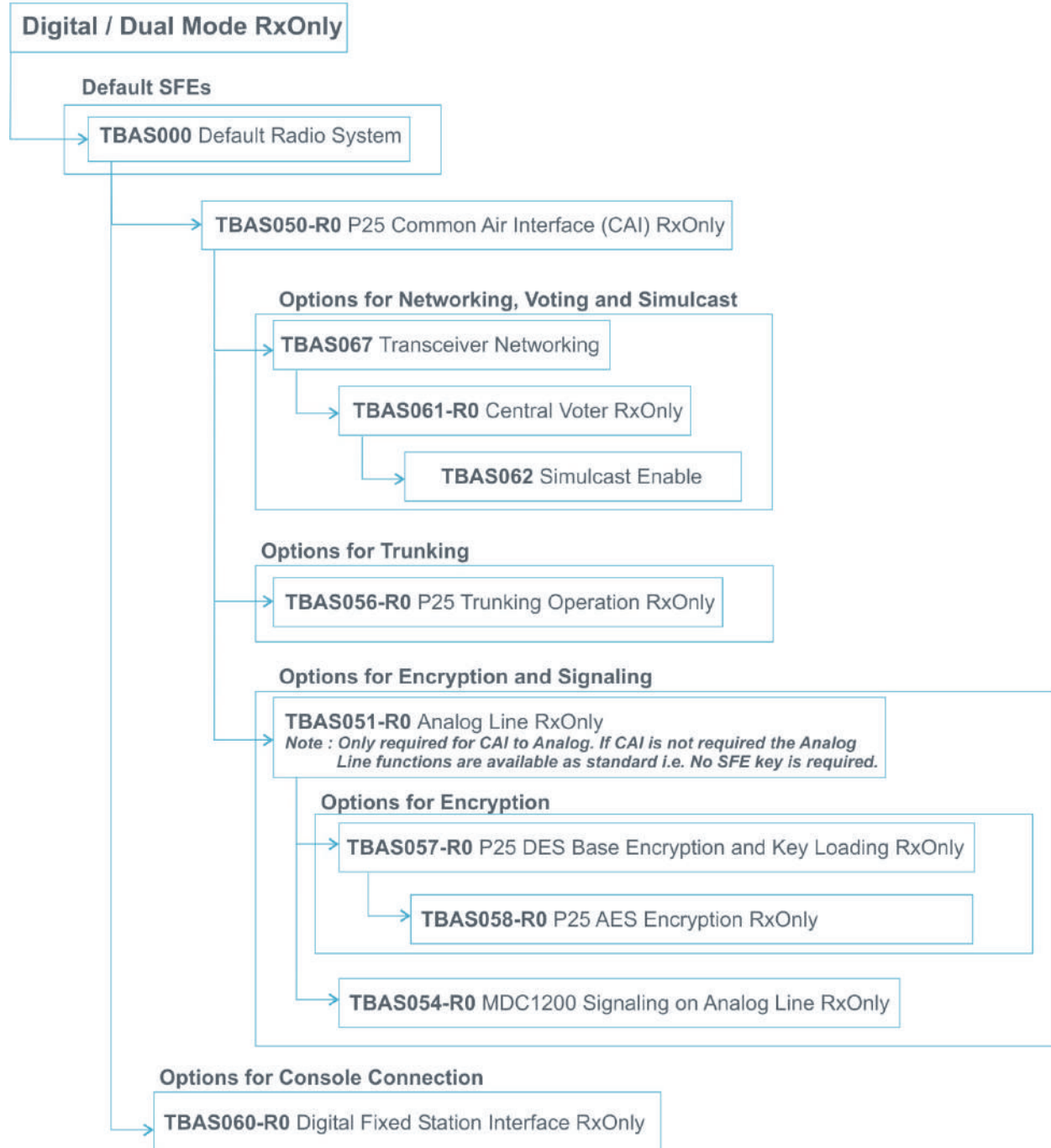
P25 Simulcast and Trunking infrastructure operate only in digital mode and do not support analog FM operation.



Software Licences - Digital / Dual Mode Rx Only

All software enhancements are enabled on a per feature per reciter basis.

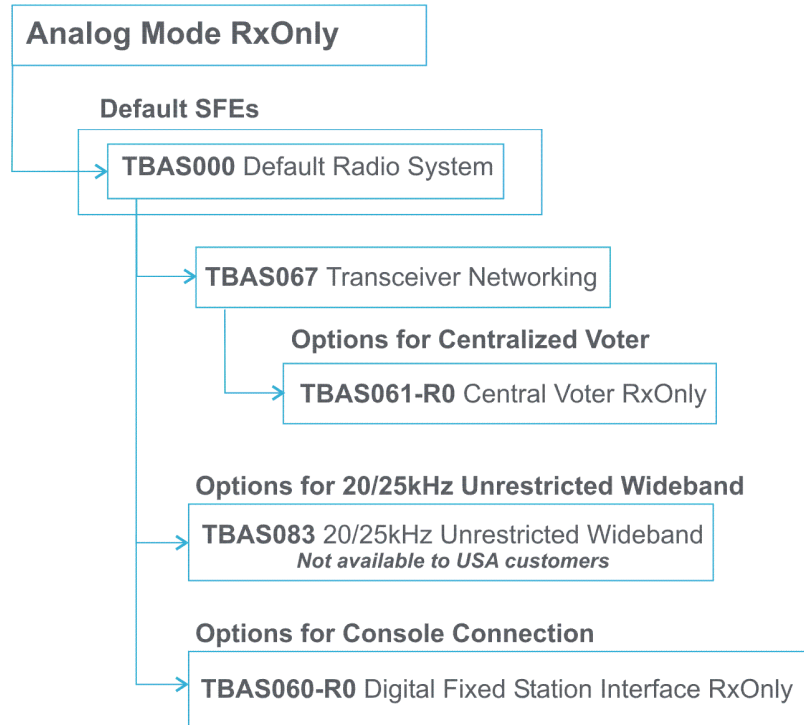
P25 Simulcast and Trunking infrastructure operate only in digital mode and do not support analog FM operation.



Software Licences - Analog Mode Rx Only

All software enhancements are enabled on a per feature per reciter basis.

P25 Simulcast and Trunking infrastructure operate only in digital mode and do not support analog FM operation.



Outline of Software Feature Sets

TB9100
TBAS000 Baseline Feature Set The default radio system feature allows the base station to transmit and receive Analog FM transmissions. The base station can make Analog FM speech calls from the Analog line and pass received Analog FM calls to the Analog line.
TBAS050 P25 Common Air Interface (CAI) The P25 common air interface feature allows the base station to transmit and receive P25 digital voice transmissions.
TBAS051 Analog Line The Analog line feature allows the base station or P25 Console Gateway to make digital P25 speech calls from the Analog line and to pass received digital P25 calls to the Analog line. This feature is not needed for Analog FM mode, for tone remote signalling, or for TSBKs.
TBAS053 Conventional Packet Data Services The Conventional Packet Data Services is a network element that can be configured to function as a packet data gateway for use in a P25 conventional network. This function is not used in trunked networks. The following network elements are suitable for this role: standalone base station or base station in a channel group (must be the central voter).
TBAS054 MDC1200 Signalling on Analog Line The MDC1200 signalling on Analog line feature allows the conversion between MDC1200 signalling and P25 TSBKs. Console systems can then use MDC1200 for ANI and other subscriber signalling to and from SUs that are operating in P25 digital mode. (In Analog FM mode, network elements pass MDC1200 transparently and do not need this feature.)
TBAS056 P25 Trunking Operation The trunking feature allows a base station to become a trunking master, functioning as an interface between the trunking site controller and the channel group. The availability of this feature license is restricted.
TBAS057 P25 Base Encryption and Key Loading The P25 base encryption and key loading feature allows the P25 base station or Console Gateway to encrypt and decrypt speech using the DES-OFB encryption algorithm, with TIA compliant 56-bit security. Subject to Export License Control.
TBAS058 P25 AES Encryption The P25 AES encryption feature allows the base station or P25 Console Gateway with a base encryption feature to also encrypt and decrypt speech using the AES algorithm with TIA compliant 256-bit security. Subject to Export License Control.
TBAS060 Digital Fixed Station Interface (DFSi) The digital fixed station interface feature allows a DFSi connection to a digital dispatch system (fixed station host), in conventional systems. The base station or P25 Console Gateway can then be an interface between its channel group and a digital dispatch system.
TBAS061 Central Voter The central voter feature allows the network element to act as a central voter within its channel group. This feature also allows voice networking. Only network elements that will centrally vote (normally the central voter and its backup) need this feature. The other members of the channel group only need the networking with distributed voter feature.
TBAS062 Simulcast Enable The simulcast enable feature is required in base stations which have transmitters and belong to a simulcast network.
TBAS063 Failsoft for P25 Trunking The Failsoft for P25 trunking feature allows trunked channels which become isolated from a site controller to perform simple conventional operation and to interface to a digital dispatch system. If a trunked channel consists of several base stations in a channel group, only the central voter (normally the master) needs this license. It is then able to become the Failsoft gateway.
TBAS067 Transceiver Networking This feature allows base stations to network together to form a channel group.
TBAS083 20/25kHz Unrestricted Wideband This feature allows Wideband operation of 20/25kHz. NOT used in the USA market places

Outline of Software Feature Sets- continued

TB9100 Rx-only	
TBAS050-R0 P25 Common Air Interface (CAI)	The P25 common air interface feature allows the base station to transmit and receive P25 digital voice transmissions.
TBAS051-R0 Analog Line	The Analog line feature allows the base station or P25 Console Gateway to make digital P25 speech calls from the Analog line and to pass received digital P25 calls to the Analog line. This feature is not needed for Analog FM mode, for tone remote signalling, or for TSBKs.
TBAS054-R0 MDC1200 Signalling on Analog Line	The MDC1200 signalling on Analog line feature allows the conversion between MDC1200 signalling and P25 TSBKs. Console systems can then use MDC1200 for ANI and other subscriber signalling to and from SUs that are operating in P25 digital mode. (In Analog FM mode, network elements pass MDC1200 transparently and do not need this feature.)
TBAS056-R0 P25 Trunking Operation	The trunking feature allows a base station to become a trunking master, functioning as an interface between the trunking site controller and the channel group. The availability of this feature license is restricted.
TBAS057-R0 P25 Base Encryption and Key Loading	The P25 base encryption and key loading feature allows the P25 base station or Console Gateway to encrypt and decrypt speech using the DES-OFB encryption algorithm, with TIA compliant 56-bit security. Subject to Export License Control.
TBAS058-R0 P25 AES Encryption	The P25 AES encryption feature allows the base station or P25 Console Gateway with a base encryption feature to also encrypt and decrypt speech using the AES algorithm with TIA compliant 256-bit security. Subject to Export License Control.
TBAS060-R0 Digital Fixed Station Interface (DFSI)	The digital fixed station interface feature allows a DFSI connection to a digital dispatch system (fixed station host), in conventional systems. The base station or P25 Console Gateway can then be an interface between its channel group and a digital dispatch system.
TBAS061-R0 Central Voter	The central voter feature allows the network element to act as a central voter within its channel group. This feature also allows voice networking. Only network elements that will centrally vote (normally the central voter and its backup) need this feature. The other members of the channel group only need the networking with distributed voter feature.

Reciter (Receiver/Exciter) Options

Use the options below to complete the TB9100 Reciter item codes shown on page 5.1-32.

For Example:

Replace characters in the item code to reflect the chosen options.

TB9100 Conventional Reciter	TBA40FF-PAX0
TB9100 Trunking Reciter	TBA40FF-PB00

Where:

Frequency Options (FF):

B2 = 136-156MHz

B3 = 148-174MHz

H1 = 400-440MHz

H2 = 440-480MHz

H3 = 470-520MHz

H4 = 380-420MHz

K4 = 794-824 & 762-870MHz

To order:

- ▶ replace FF with the required frequency code

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ K4 frequency coverage is - Transmit: 762-776MHz & 850-870MHz - Receive: 794-824MHz
- ▶ Standard base stations transport encrypted speech, and are not subject to encryption-related export restrictions.
- ▶ Dispatcher Encryption Capable base stations additionally support de/encryption on analog and digital dispatcher interfaces. These base stations are subject to encryption-related export control, please refer to page 5.1-15.
- ▶ Important: Standard base stations can never be upgraded to Dispatcher Encryption Capable.

Where:

Dispatcher Encryption Options (X):

0 = Standard base station includes support for encrypted speech

C = Dispatcher encryption capable

To order:

- ▶ replace X with the required option

Reciters (Receiver/Exciter)

Overview

- ▶ A Reciter consists of a receiver and exciter including RF, DSP & audio stages to give stable performance for the life of the products.
- ▶ A RISC processor controls the Task Manager, alarm system, fault monitoring, diagnostics, remote connectivity, and channel behavior.
- ▶ The unit includes an internally fitted system interface module (SIF) allowing configuring of the I/O system to suit the user's requirements.
- ▶ Single and dual reciter systems are available as standard. Multiple reciter systems are available on request - up to seven reciters or up to five reciters plus PMU in a subrack. Please contact your L3Harris customer support representative for further details.



Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ Additional configuration costs may apply
- ▶ Choose the frequency ("FF" value) from the table on page 5.1-30.

ITEM CODE	DESCRIPTION
TBA40FF-PA00	Base Station Conventional Reciter
TBA40FF-PAC0	Base Station Conventional Reciter Crypto Enabled
TBA40FF-PB00	Base Station Trunking Reciter
TBA50FF-PA00	Base Station Reciter Receive only
TBA50FF-PAC0	Base Station Reciter Receive only Crypto Enabled
TBA50FF-PB00	Base Station Trunking Reciter Receive only Crypto Enabled

Accessories

TBA-SP-2060

Spare Multi Reciter Control Panel



ITEM CODE	DESCRIPTION
Front Panels	
TBA-SP-F2130	TB8100/9100 Spare Front Panel without Fans & no Labelling
TBA-SP-F2132	TB8100/9100 Spare Front Panel with 2 Fans & no Labelling
TBA-SP-F2135	TB8100/9100 Spare Front Panel with PA Fan & no Labelling
TBA-SP-F2136	TB8100/9100 Spare Front Panel with PMU Fan & no Labelling
Control Panel Spares	
TBA-SP-2060	TB8100/9100 Spare Multi Reciter Control Panel
Cable	
TBAA04-05	TB8100/9100 Dual Channel Auxiliary Power Cable 2way Kit

Power Amplifiers (PA)

Used with the PMU TB9100 system:

- ▶ Broadband
- ▶ Remotely configurable and programmable
- ▶ 100% duty cycle @ 60°C (140°F)
- ▶ 2.5 millisecond key-up-time
- ▶ Programmable output power in 1W steps
- ▶ Up to two 5W and/or 50W PA can be fitted into a TB9100 subrack
- ▶ A limit of one 100W PA can be fitted into a TB9100 subrack



ITEM CODE	DESCRIPTION
TBA70B1-0000	TB8100/9100 Power Amplifier 136-174M 5W
TBA70H0-0000	TB8100/9100 Power Amplifier 380-520M 5W
TBA70K2-0000	TB8100/9100 Power Amplifier 762-870M 5W
TBA80B1-0000	TB8100/9100 Power Amplifier 136-174M 50W
TBA80H0-0000	TB8100/9100 Power Amplifier 380-520M 50W
TBA80K2-0000	TB8100/9100 Power Amplifier 762-870M 50W
TBA90B1-0000	TB8100/9100 Power Amplifier 136-174M 100W
TBA90H0-0000	TB8100/9100 Power Amplifier 380-520M 100W
TBA90K2-0000	TB8100/9100 Power Amplifier 762-870M 100W

Power Amplifiers (PA) - 12VDC

Used with the 12VDC PA only TB9100 system:

- ▶ Broadband
- ▶ Remotely configurable and programmable
- ▶ 100% duty cycle @ 60°C (140°F)
- ▶ 2.5 millisecond key-up-time
- ▶ Programmable output power in 1W steps
- ▶ Up to two 5W and/or 50W PA can be fitted into a TB9100 subrack



ITEM CODE	DESCRIPTION
TBA71B1-0000	TB8100/9100 Power Amplifier 136-174M 5W 12VDC
TBA71H0-0000	TB8100/9100 Power Amplifier 380-520M 5W 12VDC
TBA71K2-0000	TB8100/9100 Power Amplifier 762-870M 5W 12VDC
TBA81B1-0000	TB8100/9100 Power Amplifier 136-174M 50W 12VDC
TBA81H0-0000	TB8100/9100 Power Amplifier 380-520M 50W 12VDC
TBA81K2-0000	TB8100/9100 Power Amplifier 762-870M 50W 12VDC

Power Management Units (PMU) - AC

Standard Package Includes:

- ▶ 88 to 264V input with power factor correction
- ▶ Sufficient output power to drive 1 x 100W transmitter or up to two 5/50W transmitters
- ▶ Remotely controllable and programmable
- ▶ Built-in alarms and diagnostics

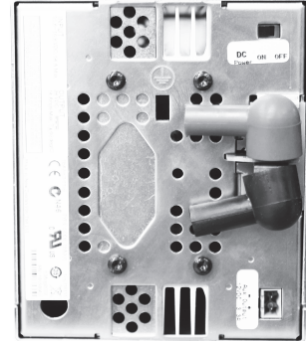


ITEM CODE	DESCRIPTION
TBA30A0-0100	TB8000/9000 Power Management Unit AC aux12
TBA30A0-0200	TB8000/9000 Power Management Unit AC aux24
TBA30A0-0400	TB8000/9000 Power Management Unit AC aux48

Power Management Units (PMU) - DC

Standard Package Includes:

- ▶ Operates from 12, 24 or 48VDC supply
- ▶ Input supply can be negatively or positively earthed
- ▶ Sufficient output power to drive 1 x 100W transmitter or up to two 5/50W transmitters
- ▶ Remotely controllable and programmable
- ▶ Built-in alarms and diagnostics



ITEM CODE	DESCRIPTION
TBA3001-1100	TB8000/9000 Power Management Unit DC12 aux12
TBA3001-1200	TB8000/9000 Power Management Unit DC12 aux24
TBA3001-1400	TB8000/9000 Power Management Unit DC12 aux48
TBA3002-2100	TB8000/9000 Power Management Unit DC24 aux12
TBA3002-2200	TB8000/9000 Power Management Unit DC24 aux24
TBA3002-2400	TB8000/9000 Power Management Unit DC24 aux48
TBA3004-4100	TB8000/9000 Power Management Unit DC48 aux12
TBA3004-4200	TB8000/9000 Power Management Unit DC48 aux24
TBA3004-4400	TB8000/9000 Power Management Unit DC48 aux48

Power Management Units (PMU) - ACDC

Standard Package Includes:

- ▶ Seamless and automatic switching from AC to DC
- ▶ AC operates 88 to 264V input with power factor correction
- ▶ DC operates from 12, 24 or 48VDC supply
- ▶ DC input supply can be negatively or positively earthed
- ▶ Sufficient output power to drive 1 x 100W transmitter or up to two 5/50W transmitters
- ▶ Remotely controllable and programmable
- ▶ Built-in alarms and diagnostics



ITEM CODE	DESCRIPTION
TBA30A1-1100	TB8000/9000 Power Management Unit ACDC12 aux12
TBA30A1-1200	TB8000/9000 Power Management Unit ACDC12 aux24
TBA30A1-1400	TB8000/9000 Power Management Unit ACDC12 aux48
TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12
TBA30A2-2200	TB8000/9000 Power Management Unit ACDC24 aux24
TBA30A2-2400	TB8000/9000 Power Management Unit ACDC24 aux48
TBA30A4-4100	TB8000/9000 Power Management Unit ACDC48 aux12
TBA30A4-4200	TB8000/9000 Power Management Unit ACDC48 aux24
TBA30A4-4400	TB8000/9000 Power Management Unit ACDC48 aux48

Power Management Unit (PMU) - Option Boards

Note: These provide a DC output to power auxiliary equipment.

ITEM CODE	DESCRIPTION
TBA-SP-WDA1	TB81/91/93 Spare PMU Auxiliary Supply 12VDC 40W
TBA-SP-WDA2	TB81/91/93 Spare PMU Auxiliary Supply 24VDC 40W
TBA-SP-WDA4	TB81/91/93 Spare PMU Auxiliary Supply 48VDC 40W

Accessories

ITEM CODE	DESCRIPTION
Microphone	
T02-00005-AAAC	TM Standard Microphone L3Harris
Adaptor Front Panel	
TBA60C0	TB9100 Adaptor Front Panel 1U RJ45
Coaxial Relay Assembly	
TBAA03-15	TB9100 Relay Coax Assembly Fit with Single Mounting Bracket
Programming Accessories	
TBA0P20	TB9100 Crossover & Audio Cables
Power Cords	
T952-310	Mains Power Lead ANZ-IEC
T952-320	Mains Power Lead UK-IEC
T952-330	Mains Power Lead EUR-IEC
T952-340	Mains Power Lead US/CAN IEC
Support Brackets	
TBAA03-13	TB8000/9000 Auxiliary Support Bracket
Handles	
TBAA03-16	TB8000/9000 Carrying Handles <i>Note: Can only be used with restriction of hazardous substances (RoHS) compliant (silver/blue) subracks</i>
Cabinets	
T-C08U19L-00	Cabinet 8U Black 19" 600x600mm with Front & Rear Doors
T-C12U19L-00	Cabinet 12U Black 19" 600x600mm with Front & Rear Doors
T-C25U19L-00	Cabinet 25U Black 19" 600x600mm with Front & Rear Doors
T-C38U19L-00	Cabinet 38U Black 19" 600x600mm with Front & Rear Doors
T-C45U19L-00	Cabinet 45U Black 19" 600x600mm with Front & Rear Doors

Service Accessories

Calibration test unit:

- ▶ The calibration test unit is required when using the service kit to access the reciter when it is not in the subrack
- ▶ It is required for system re-tuning and extremely useful for system test and run-up, especially when commissioning new configuration and running radio diagnostics
- ▶ Supplied with cables for use with the TB7100, TB8100 and TB9100



Tool kit includes:

- ▶ Control panel board remover
- ▶ Torx-driver T8
- ▶ Torx-driver T10
- ▶ Torx-driver T20
- ▶ Screwdriver PZD-2
- ▶ Screwdriver medium flat blade
- ▶ Tuning tool cer 2.2mm
- ▶ Tuning tool 5CCE
- ▶ Tuning tool Johanson 8777
- ▶ Spanner 5/16
- ▶ Socket head M3 nuts
- ▶ Tool bag



ITEM CODE	DESCRIPTION
TBA0STU	Base Station Calibration Test Unit & Cable
TBA0ST2	Base Station Tool Kit

TB9100

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

P25 Digital Base Station - TB9100

TB9100 - Single VHF with PMU - (NO Software License Included)

E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9115B2DP0000A400	Rptr 136-156M 5W AC/12 conv SIF	\$ 8,244.00
S	TB9115B2DP0000C000	Rptr 136-156M 5W DC12/12 conv SIF	\$ 8,231.00
S	TB9115B2DP0000J400	Rptr 136-156M 5W ACDC12/12 conv SIF	\$ 8,856.00
S	TB9115B2HP0000A400	Rptr 136-156M 50W AC/12 conv SIF	\$ 9,033.00
S	TB9115B2HP0000C000	Rptr 136-156M 50W DC12/12 conv SIF	\$ 9,020.00
S	TB9115B2HP0000J400	Rptr 136-156M 50W ACDC12/12 conv SIF	\$ 9,645.00
S	TB9135B2MP0000A400	Rptr 136-156M 100W AC/12 conv SIF	\$ 9,794.00
S	TB9135B2MP0000C000	Rptr 136-156M 100W DC12/12 conv SIF	\$ 9,781.00
S	TB9135B2MP0000J400	Rptr 136-156M 100W ACDC12/12 conv SIF	\$ 10,406.00
S	TB9115B3DP0000A400	Rptr 148-174M 5W AC/12 conv SIF	\$ 8,244.00
S	TB9115B3DP0000C000	Rptr 148-174M 5W DC12/12 conv SIF	\$ 8,231.00
S	TB9115B3DP0000J400	Rptr 148-174M 5W ACDC12/12 conv SIF	\$ 8,856.00
S	TB9115B3HP0000A400	Rptr 148-174M 50W AC/12 conv SIF	\$ 9,033.00
S	TB9115B3HP0000C000	Rptr 148-174M 50W DC12/12 conv SIF	\$ 9,020.00
S	TB9115B3HP0000J400	Rptr 148-174M 50W ACDC12/12 conv SIF	\$ 9,645.00
S	TB9135B3MP0000A400	Rptr 148-174M 100W AC/12 conv SIF	\$ 9,794.00
S	TB9135B3MP0000C000	Rptr 148-174M 100W DC12/12 conv SIF	\$ 9,781.00
S	TB9135B3MP0000J400	Rptr 148-174M 100W ACDC12/12 conv SIF	\$ 10,406.00
	Encrypted System Interface (SIF)		
S	TB9115B2DE0000A400	Rptr 136-156M 5W AC/12 Enc SIF	\$ 8,244.00
S	TB9115B2DE0000C000	Rptr 136-156M 5W DC12/12 Enc SIF	\$ 8,231.00
S	TB9115B2DE0000J400	Rptr 136-156M 5W ACDC12/12 Enc SIF	\$ 8,856.00
S	TB9115B2HE0000A400	Rptr 136-156M 50W AC/12 Enc SIF	\$ 9,033.00
S	TB9115B2HE0000C000	Rptr 136-156M 50W DC12/12 Enc SIF	\$ 9,020.00
S	TB9115B2HE0000J400	Rptr 136-156M 50W ACDC12/12 Enc SIF	\$ 9,645.00
S	TB9135B2ME0000A400	Rptr 136-156M 100W AC/12 Enc SIF	\$ 9,794.00
S	TB9135B2ME0000C000	Rptr 136-156M 100W DC12/12 Enc SIF	\$ 9,781.00
S	TB9135B2ME0000J400	Rptr 136-156M 100W ACDC12/12 Enc SIF	\$ 10,406.00
S	TB9115B3DE0000A400	Rptr 148-174M 5W AC/12 Enc SIF	\$ 8,244.00
S	TB9115B3DE0000C000	Rptr 148-174M 5W DC12/12 Enc SIF	\$ 8,231.00
S	TB9115B3DE0000J400	Rptr 148-174M 5W ACDC12/12 Enc SIF	\$ 8,856.00
S	TB9115B3HE0000A400	Rptr 148-174M 50W AC/12 Enc SIF	\$ 9,033.00
S	TB9115B3HE0000C000	Rptr 148-174M 50W DC12/12 Enc SIF	\$ 9,020.00
S	TB9115B3HE0000J400	Rptr 148-174M 50W ACDC12/12 Enc SIF	\$ 9,645.00
S	TB9135B3ME0000A400	Rptr 148-174M 100W AC/12 Enc SIF	\$ 9,794.00
S	TB9135B3ME0000C000	Rptr 148-174M 100W DC12/12 Enc SIF	\$ 9,781.00
S	TB9135B3ME0000J400	Rptr 148-174M 100W ACDC12/12 Enc SIF	\$ 10,406.00

	Trunking System Interface (SIF)		
S	TB9115B2DT0000A400	Rptr 136-156M 5W AC/12 trk SIF	\$ 8,244.00
S	TB9115B2DT0000C000	Rptr 136-156M 5W DC12/12 trk SIF	\$ 8,231.00
S	TB9115B2DT0000J400	Rptr 136-156M 5W ACDC12/12 trk SIF	\$ 8,856.00
S	TB9115B2HT0000A400	Rptr 136-156M 50W AC/12 trk SIF	\$ 9,033.00
S	TB9115B2HT0000C000	Rptr 136-156M 50W DC12/12 trk SIF	\$ 9,020.00
S	TB9115B2HT0000J400	Rptr 136-156M 50W ACDC12/12 trk SIF	\$ 9,645.00
S	TB9135B2MT0000A400	Rptr 136-156M 100W AC/12 trk SIF	\$ 9,794.00
S	TB9135B2MT0000C000	Rptr 136-156M 100W DC12/12 trk SIF	\$ 9,781.00
S	TB9135B2MT0000J400	Rptr 136-156M 100W ACDC12/12 trk	\$ 10,406.00
S	TB9115B3DT0000A400	Rptr 148-174M 5W AC/12 trk SIF	\$ 8,244.00
S	TB9115B3DT0000C000	Rptr 148-174M 5W DC12/12 trk SIF	\$ 8,231.00
S	TB9115B3DT0000J400	Rptr 148-174M 5W ACDC12/12 trk SIF	\$ 8,856.00
S	TB9115B3HT0000A400	Rptr 148-174M 50W AC/12 trk SIF	\$ 9,033.00
S	TB9115B3HT0000C000	Rptr 148-174M 50W DC12/12 trk SIF	\$ 9,020.00
S	TB9115B3HT0000J400	Rptr 148-174M 50W ACDC12/12 trk	\$ 9,645.00
S	TB9135B3MT0000A400	Rptr 148-174M 100W AC/12 trk SIF	\$ 9,794.00
S	TB9135B3MT0000C000	Rptr 148-174M 100W DC12/12 trk SIF	\$ 9,781.00
S	TB9135B3MT0000J400	Rptr 148-174M 100W ACDC12/12 trk	\$ 10,406.00
TB9100 - Single UHF with PMU - (NO Software License Included)			
E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9115H1DP0000A400	Rptr 400-440M 5W AC/12 conv SIF	\$ 8,244.00
S	TB9115H1DP0000C000	Rptr 400-440M 5W DC12/12 conv SIF	\$ 8,231.00
S	TB9115H1DP0000J400	Rptr 400-440M 5W ACDC12/12 conv SIF	\$ 8,856.00
S	TB9115H1HP0000A400	Rptr 400-440M 50W AC/12 conv SIF	\$ 9,033.00
S	TB9115H1HP0000C000	Rptr 400-440M 50W DC12/12 conv SIF	\$ 9,020.00
S	TB9115H1HP0000J400	Rptr 400-440M 50W ACDC12/12 conv SIF	\$ 9,645.00
S	TB9135H1MP0000A400	Rptr 400-440M 100W AC/12 conv SIF	\$ 9,794.00
S	TB9135H1MP0000C000	Rptr 400-440M 100W DC12/12 conv SIF	\$ 9,781.00
S	TB9135H1MP0000J400	Rptr 400-440M 100W ACDC12/12 conv	\$ 10,406.00
S	TB9115H2DP0000A400	Rptr 440-480M 5W AC/12 conv SIF	\$ 8,244.00
S	TB9115H2DP0000C000	Rptr 440-480M 5W DC12/12 conv SIF	\$ 8,231.00
S	TB9115H2DP0000J400	Rptr 440-480M 5W ACDC12/12 conv SIF	\$ 8,856.00
S	TB9115H2HP0000A400	Rptr 440-480M 50W AC/12 conv SIF	\$ 9,033.00
S	TB9115H2HP0000C000	Rptr 440-480M 50W DC12/12 conv SIF	\$ 9,020.00
S	TB9115H2HP0000J400	Rptr 440-480M 50W ACDC12/12 conv SIF	\$ 9,645.00
S	TB9135H2MP0000A400	Rptr 440-480M 100W AC/12 conv SIF	\$ 9,794.00
S	TB9135H2MP0000C000	Rptr 440-480M 100W DC12/12 conv SIF	\$ 9,781.00
S	TB9135H2MP0000J400	Rptr 440-480M 100W ACDC12/12 conv	\$ 10,406.00
S	TB9115H3DP0000A400	Rptr 470-520M 5W AC/12 conv SIF	\$ 8,244.00
S	TB9115H3DP0000C000	Rptr 470-520M 5W DC12/12 conv SIF	\$ 8,231.00
S	TB9115H3DP0000J400	Rptr 470-520M 5W ACDC12/12 conv SIF	\$ 8,856.00
S	TB9115H3HP0000A400	Rptr 470-520M 50W AC/12 conv SIF	\$ 9,033.00
S	TB9115H3HP0000C000	Rptr 470-520M 50W DC12/12 conv SIF	\$ 9,020.00
S	TB9115H3HP0000J400	Rptr 470-520M 50W ACDC12/12 conv SIF	\$ 9,645.00
S	TB9135H3MP0000A400	Rptr 470-520M 100W AC/12 conv SIF	\$ 9,794.00
S	TB9135H3MP0000C000	Rptr 470-520M 100W DC12/12 conv SIF	\$ 9,781.00
S	TB9135H3MP0000J400	Rptr 470-520M 100W ACDC12/12 conv	\$ 10,406.00
S	TB9115H4DP0000A400	Rptr 380-420M 5W AC/12 conv SIF	\$ 8,244.00
S	TB9115H4DP0000C000	Rptr 380-420M 5W DC12/12 conv SIF	\$ 8,231.00
S	TB9115H4DP0000J400	Rptr 380-420M 5W ACDC12/12 conv SIF	\$ 8,856.00
S	TB9115H4HP0000A400	P25 Anlg 380-420M 50W D9 Std AC/12	\$ 9,033.00
S	TB9115H4HP0000C000	P25 Anlg 380-420M 50W D9 Std DC/12	\$ 9,020.00
S	TB9115H4HP0000J400	P25 Anlg 380-420M 50W D9 Std ACDC/12	\$ 9,645.00
S	TB9135H4MP0000A400	Rptr 380-420M 100W AC/12 conv SIF	\$ 9,794.00
S	TB9135H4MP0000C000	Rptr 380-420M 100W DC12/12 conv SIF	\$ 9,781.00
S	TB9135H4MP0000J400	Rptr 380-420M 100W ACDC12/12 conv	\$ 10,406.00

	Encrypted System Interface (SIF)		
S	TB9115H1DE0000A400	Rptr 400-440M 5W AC/12 Enc SIF	\$ 8,244.00
S	TB9115H1DE0000C000	Rptr 400-440M 5W DC12/12 Enc SIF	\$ 8,231.00
S	TB9115H1DE0000J400	Rptr 400-440M 5W ACDC12/12 Enc SIF	\$ 8,856.00
S	TB9115H1HE0000A400	Rptr 400-440M 50W AC/12 Enc SIF	\$ 9,033.00
S	TB9115H1HE0000C000	Rptr 400-440M 50W DC12/12 Enc SIF	\$ 9,020.00
S	TB9115H1HE0000J400	Rptr 400-440M 50W ACDC12/12 Enc SIF	\$ 9,645.00
S	TB9135H1ME0000A400	Rptr 400-440M 100W AC/12 Enc SIF	\$ 9,794.00
S	TB9135H1ME0000C000	Rptr 400-440M 100W DC12/12 Enc SIF	\$ 9,781.00
S	TB9135H1ME0000J400	Rptr 400-440M 100W ACDC12/12 Enc SIF	\$ 10,406.00
S	TB9115H2DE0000A400	Rptr 440-480M 5W AC/12 Enc SIF	\$ 8,244.00
S	TB9115H2DE0000C000	Rptr 440-480M 5W DC12/12 Enc SIF	\$ 8,231.00
S	TB9115H2DE0000J400	Rptr 440-480M 5W ACDC12/12 Enc SIF	\$ 8,856.00
S	TB9115H2HE0000A400	Rptr 440-480M 50W AC/12 Enc SIF	\$ 9,033.00
S	TB9115H2HE0000C000	Rptr 440-480M 50W DC12/12 Enc SIF	\$ 9,020.00
S	TB9115H2HE0000J400	Rptr 440-480M 50W ACDC12/12 Enc SIF	\$ 9,645.00
S	TB9135H2ME0000A400	Rptr 440-480M 100W AC/12 Enc SIF	\$ 9,794.00
S	TB9135H2ME0000C000	Rptr 440-480M 100W DC12/12 Enc SIF	\$ 9,781.00
S	TB9135H2ME0000J400	Rptr 440-480M 100W ACDC12/12 Enc SIF	\$ 10,406.00
S	TB9115H3DE0000A400	Rptr 470-520M 5W AC/12 Enc SIF	\$ 8,244.00
S	TB9115H3DE0000C000	Rptr 470-520M 5W DC12/12 Enc SIF	\$ 8,231.00
S	TB9115H3DE0000J400	Rptr 470-520M 5W ACDC12/12 Enc SIF	\$ 8,856.00
S	TB9115H3HE0000A400	Rptr 470-520M 50W AC/12 Enc SIF	\$ 9,033.00
S	TB9115H3HE0000C000	Rptr 470-520M 50W DC12/12 Enc SIF	\$ 9,020.00
S	TB9115H3HE0000J400	Rptr 470-520M 50W ACDC12/12 Enc SIF	\$ 9,645.00
S	TB9135H3ME0000A400	Rptr 470-520M 100W AC/12 Enc SIF	\$ 9,794.00
S	TB9135H3ME0000C000	Rptr 470-520M 100W DC12/12 Enc SIF	\$ 9,781.00
S	TB9135H3ME0000J400	Rptr 470-520M 100W ACDC12/12 Enc SIF	\$ 10,406.00
S	TB9115H4DE0000A400	Rptr 380-420M 5W AC/12 Enc SIF	\$ 8,244.00
S	TB9115H4DE0000C000	Rptr 380-420M 5W DC12/12 Enc SIF	\$ 8,231.00
S	TB9115H4DE0000J400	Rptr 380-420M 5W ACDC12/12 Enc SIF	\$ 8,856.00
S	TB9115H4HE0000A400	Rptr 380-420M 50W AC/12 Enc SIF	\$ 9,033.00
S	TB9115H4HE0000C000	Rptr 380-420M 50W DC12/12 Enc SIF	\$ 9,020.00
S	TB9115H4HE0000J400	Rptr 380-420M 50W ACDC12/12 Enc SIF	\$ 9,645.00
S	TB9135H4ME0000A400	Rptr 380-420M 100W AC/12 Enc SIF	\$ 9,794.00
S	TB9135H4ME0000C000	Rptr 380-420M 100W DC12/12 Enc SIF	\$ 9,781.00
S	TB9135H4ME0000J400	Rptr 380-420M 100W ACDC12/12 Enc SIF	\$ 10,406.00
	Trunking System Interface (SIF)		
S	TB9115H1DT0000A400	Rptr 400-440M 5W AC/12 trk SIF	\$ 8,244.00
S	TB9115H1DT0000C000	Rptr 400-440M 5W DC12/12 trk SIF	\$ 8,231.00
S	TB9115H1DT0000J400	Rptr 400-440M 5W ACDC12/12 trk SIF	\$ 8,856.00
S	TB9115H1HT0000A400	Rptr 400-440M 50W AC/12 trk SIF	\$ 9,033.00
S	TB9115H1HT0000C000	Rptr 400-440M 50W DC12/12 trk SIF	\$ 9,020.00
S	TB9115H1HT0000J400	Rptr 400-440M 50W ACDC12/12 trk	\$ 9,645.00
S	TB9135H1MT0000A400	Rptr 400-440M 100W AC/12 trk SIF	\$ 9,794.00
S	TB9135H1MT0000C000	Rptr 400-440M 100W DC12/12 trk SIF	\$ 9,781.00
S	TB9135H1MT0000J400	Rptr 400-440M 100W ACDC12/12 trk	\$ 10,406.00
S	TB9115H2DT0000A400	P25 Anlg 440-480M 5W D9 Bal AC/12	\$ 8,244.00
S	TB9115H2DT0000C000	P25 Anlg 440-480M 5W D9 Bal DC/12	\$ 8,231.00
S	TB9115H2DT0000J400	P25 Anlg 440-480M 5W D9 Bal ACDC/12	\$ 8,856.00
S	TB9115H2HT0000A400	Rptr 440-480M 50W AC/12 trk SIF	\$ 9,033.00
S	TB9115H2HT0000C000	Rptr 440-480M 50W DC12/12 trk SIF	\$ 9,020.00
S	TB9115H2HT0000J400	Rptr 440-480M 50W ACDC12/12 trk	\$ 9,645.00

S	TB9135H2MT0000A400	Rptr 440-480M 100W AC/12 trk SIF	\$ 9,794.00
S	TB9135H2MT0000C000	Rptr 440-480M 100W DC12/12 trk SIF	\$ 9,781.00
S	TB9135H2MT0000J400	Rptr 440-480M 100W ACDC12/12 trk	\$ 10,406.00
S			
S	TB9115H3DT0000A400	Rptr 470-520M 5W AC/12 trk SIF	\$ 8,244.00
S	TB9115H3DT0000C000	Rptr 470-520M 5W DC12/12 trk SIF	\$ 8,231.00
S	TB9115H3DT0000J400	Rptr 470-520M 5W ACDC12/12 trk SIF	\$ 8,856.00
S			
S	TB9115H3HT0000A400	Rptr 470-520M 50W AC/12 trk SIF	\$ 9,033.00
S	TB9115H3HT0000C000	Rptr 470-520M 50W DC12/12 trk SIF	\$ 9,020.00
S	TB9115H3HT0000J400	Rptr 470-520M 50W ACDC12/12 trk	\$ 9,645.00
S			
S	TB9135H3MT0000A400	Rptr 470-520M 100W AC/12 trk SIF	\$ 9,794.00
S	TB9135H3MT0000C000	Rptr 470-520M 100W DC12/12 trk SIF	\$ 9,781.00
S	TB9135H3MT0000J400	Rptr 470-520M 100W ACDC12/12 trk	\$ 10,406.00
S			
S	TB9115H4DT0000A400	Rptr 380-420M 5W AC/12 trk SIF	\$ 8,244.00
S	TB9115H4DT0000C000	Rptr 380-420M 5W DC12/12 trk SIF	\$ 8,231.00
S	TB9115H4DT0000J400	Rptr 380-420M 5W ACDC12/12 trk SIF	\$ 8,856.00
S			
S	TB9115H4HT0000A400	Rptr 380-420M 50W AC/12 trk SIF	\$ 9,033.00
S	TB9115H4HT0000C000	Rptr 380-420M 50W DC12/12 trk SIF	\$ 9,020.00
S	TB9115H4HT0000J400	Rptr 380-420M 50W ACDC12/12 trk	\$ 9,645.00
S			
S	TB9135H4MT0000A400	Rptr 380-420M 100W AC/12 trk SIF	\$ 9,794.00
S	TB9135H4MT0000C000	Rptr 380-420M 100W DC12/12 trk SIF	\$ 9,781.00
S	TB9135H4MT0000J400	Rptr 380-420M 100W ACDC12/12 trk	\$ 10,406.00
TB9100 Single 700/800MHz with PMU (NO Software License Included)			
E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9115K4DP0000A400	Rptr 762-870M 5W AC/12 conv SIF	\$ 8,244.00
S	TB9115K4DP0000C000	Rptr 762-870M 5W DC12/12 conv SIF	\$ 8,231.00
S	TB9115K4DP0000J400	Rptr 762-870M 5W ACDC12/12 conv SIF	\$ 8,856.00
S			
S	TB9115K4HP0000A400	Rptr 762-870M 50W AC/12 conv SIF	\$ 9,033.00
S	TB9115K4HP0000C000	Rptr 762-870M 50W DC12/12 conv SIF	\$ 9,020.00
S	TB9115K4HP0000J400	Rptr 762-870M 50W ACDC12/12 conv SIF	\$ 9,645.00
S			
S	TB9135K4MP0000A400	Rptr 762-870M 100W AC/12 conv SIF	\$ 9,794.00
S	TB9135K4MP0000C000	Rptr 762-870M 100W DC12/12 conv SIF	\$ 9,781.00
S	TB9135K4MP0000J400	Rptr 762-870M 100W ACDC12/12 conv	\$ 10,406.00
	Encrypted System Interface (SIF)		
S	TB9115K4DE0000A400	Rptr 762-870M 5W AC/12 Enc SIF	\$ 8,244.00
S	TB9115K4DE0000C000	Rptr 762-870M 5W DC12/12 Enc SIF	\$ 8,231.00
S	TB9115K4DE0000J400	Rptr 762-870M 5W ACDC12/12 Enc SIF	\$ 8,856.00
S			
S	TB9115K4HE0000A400	Rptr 762-870M 50W AC/12 Enc SIF	\$ 9,033.00
S	TB9115K4HE0000C000	Rptr 762-870M 50W DC12/12 Enc SIF	\$ 9,020.00
S	TB9115K4HE0000J400	Rptr 762-870M 50W ACDC12/12 Enc SIF	\$ 9,645.00
S			
S	TB9135K4ME0000A400	Rptr 762-870M 100W AC/12 Enc SIF	\$ 9,794.00
S	TB9135K4ME0000C000	Rptr 762-870M 100W DC12/12 Enc SIF	\$ 9,781.00
S	TB9135K4ME0000J400	Rptr 762-870M 100W ACDC12/12 Enc SIF	\$ 10,406.00
	Trunking System Interface (SIF)		
S	TB9115K4DT0000A400	Rptr 762-870M 5W AC/12 trk SIF	\$ 8,244.00
S	TB9115K4DT0000C000	Rptr 762-870M 5W DC12/12 trk SIF	\$ 8,231.00
S	TB9115K4DT0000J400	Rptr 762-870M 5W ACDC12/12 trk SIF	\$ 8,856.00
S			
S	TB9115K4HT0000A400	Rptr 762-870M 50W AC/12 trk SIF	\$ 9,033.00
S	TB9115K4HT0000C000	Rptr 762-870M 50W DC12/12 trk SIF	\$ 9,020.00
S	TB9115K4HT0000J400	Rptr 762-870M 50W ACDC12/12 trk	\$ 9,645.00
S			
S	TB9135K4MT0000A400	Rptr 762-870M 100W AC/12 trk SIF	\$ 9,794.00
S	TB9135K4MT0000C000	Rptr 762-870M 100W DC12/12 trk SIF	\$ 9,781.00
S	TB9135K4MT0000J400	Rptr 762-870M 100W ACDC12/12 trk	\$ 10,406.00

TB9100 Dual VHF with PMU (NO Software License Included)

Option to exclude SIF in second repeater exists, please refer to the Product Catalog or contact your L3Harris Representative for the configured part number.

E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9115B2DPB2DPA400	Rptr 136-156M D5/5W AC/12 conv SIF	\$ 13,372.00
S	TB9115B2DPB2DPC000	Rptr 136-156M D5/5W DC12/12 conv SIF	\$ 13,359.00
S	TB9115B2DPB2DPJ400	Rptr 136-156M D5/5W ACDC12/12 conv	\$ 13,984.00
S	TB9115B2HPB2HPA400	Rptr 136-156M D50/50W AC/12 conv SIF	\$ 14,950.00
S	TB9115B2HPB2HPC000	Rptr 136-156M D50/50W DC12/12 conv SIF	\$ 14,937.00
S	TB9115B2HPB2HPJ400	Rptr 136-156M D50/50W ACDC12/12 conv	\$ 15,562.00
S	TB9115B2DPB2HPA400	Rptr 136-156M D5/50W AC/12 conv SIF	\$ 14,161.00
S	TB9115B2DPB2HPC000	Rptr 136-156M D5/50W DC12/12 conv SIF	\$ 14,148.00
S	TB9115B2DPB2HPJ400	Rptr 136-156M D5/50W ACDC12/12 conv	\$ 14,773.00
S	TB9115B3DPB3DPA400	Rptr 148-174M D5/5W AC/12 conv SIF	\$ 13,372.00
S	TB9115B3DPB3DPC000	Rptr 148-174M D5/5W DC12/12 conv SIF	\$ 13,359.00
S	TB9115B3DPB3DPJ400	Rptr 148-174M D5/5W ACDC12/12 conv	\$ 13,984.00
S	TB9115B3HPB3HPA400	Rptr 148-174M D50/50W AC/12 conv SIF	\$ 14,950.00
S	TB9115B3HPB3HPC000	Rptr 148-174M D50/50W DC12/12 conv SIF	\$ 14,937.00
S	TB9115B3HPB3HPJ400	Rptr 148-174M D50/50W ACDC12/12 conv	\$ 15,562.00
S	TB9115B3DPB3HPA400	Rptr 148-174M D5/50W AC/12 conv SIF	\$ 14,161.00
S	TB9115B3DPB3HPC000	Rptr 148-174M D5/50W DC12/12 conv SIF	\$ 14,148.00
S	TB9115B3DPB3HPJ400	Rptr 148-174M D5/50W ACDC12/12 conv	\$ 14,773.00
	Encrypted System Interface (SIF)		
S	TB9115B2DEB2DEA400	Rptr 136-156M D5/5W AC/12 Enc SIF	\$ 13,372.00
S	TB9115B2DEB2DEC000	Rptr 136-156M D5/5W DC12/12 Enc SIF	\$ 13,359.00
S	TB9115B2DEB2DEJ400	Rptr 136-156M D5/5W ACDC12/12 Enc SIF	\$ 13,984.00
S	TB9115B3DEB3DEA400	Rptr 148-174M D5/5W AC/12 Enc SIF	\$ 13,372.00
S	TB9115B3DEB3DEC000	Rptr 148-174M D5/5W DC12/12 Enc SIF	\$ 13,359.00
S	TB9115B3DEB3DEJ400	Rptr 148-174M D5/5W ACDC12/12 Enc SIF	\$ 13,984.00
S	TB9115B2DEB2HEA400	Rptr 136-156M D5/50W AC/12 Enc SIF	\$ 14,161.00
S	TB9115B2DEB2HEC000	Rptr 136-156M D5/50W DC12/12 Enc SIF	\$ 14,148.00
S	TB9115B2DEB2HEJ400	Rptr 136-156M D5/50W ACDC12/12 Enc SIF	\$ 14,773.00
S	TB9115B3HEB3HEA400	Rptr 148-174M D50/50W AC/12 Enc SIF	\$ 14,950.00
S	TB9115B3HEB3HEC000	Rptr 148-174M D50/50W DC12/12 Enc SIF	\$ 14,937.00
S	TB9115B3HEB3HEJ400	Rptr 148-174M D50/50W ACDC12/12 Enc	\$ 15,562.00
S	TB9115B3DEB3HEA400	Rptr 148-174M D5/50W AC/12 Enc SIF	\$ 14,161.00
S	TB9115B3DEB3HEC000	Rptr 148-174M D5/50W DC12/12 Enc SIF	\$ 14,148.00
S	TB9115B3DEB3HEJ400	Rptr 148-174M D5/50W ACDC12/12 Enc SIF	\$ 14,773.00
	Trunking System Interface (SIF)		
S	TB9115B2DTB2DTA400	Rptr 136-156M D5/5W AC/12 Trk SIF	\$ 13,372.00
S	TB9115B2DTB2DTC000	Rptr 136-156M D5/5W DC12/12 Trk SIF	\$ 13,359.00
S	TB9115B2DTB2HTJ400	Rptr 136-156M D5/50W ACDC12/12 trk	\$ 14,773.00
S	TB9115B2DTB2DTJ400	Rptr 136-156M D5/5W ACDC12/12 trk SIF	\$ 13,984.00
S	TB9115B2HTB2HTA400	Rptr 136-156M D50/50W AC/12 trk SIF	\$ 14,950.00
S	TB9115B2HTB2HTC000	Rptr 136-156M D50/50W DC12/12 trk SIF	\$ 14,937.00
S	TB9115B2HTB2HTJ400	Rptr 136-156M D50/50W ACDC12/12 trk	\$ 15,562.00
S	TB9115B2DTB2HTA400	Rptr 136-156M D5/50W AC/12 trk SIF	\$ 14,161.00
S	TB9115B2DTB2HTC000	Rptr 136-156M D5/50W DC12/12 trk SIF	\$ 14,148.00
S	TB9115B3DTB3DTA400	Rptr 148-174M D5/5W AC/12 trk SIF	\$ 13,372.00
S	TB9115B3DTB3DTC000	Rptr 148-174M D5/5W DC12/12 trk SIF	\$ 13,359.00
S	TB9115B3DTB3DTJ400	Rptr 148-174M D5/5W ACDC12/12 Trk SIF	\$ 13,984.00
S	TB9115B3HTB3HTA400	Rptr 148-174M D50/50W AC/12 trk SIF	\$ 14,950.00
S	TB9115B3HTB3HTC000	Rptr 148-174M D50/50W DC12/12 trk SIF	\$ 14,937.00
S	TB9115B3HTB3HTJ400	Rptr 148-174M D50/50W ACDC12/12 trk	\$ 15,562.00
S	TB9115B3DTB3HTA400	Rptr 148-174M D5/50W AC/12 trk SIF	\$ 14,161.00
S	TB9115B3DTB3HTC000	Rptr 148-174M D5/50W DC12/12 trk SIF	\$ 14,148.00
S	TB9115B3DTB3HTJ400	Rptr 148-174M D5/50W ACDC12/12 trk	\$ 14,773.00

TB9100 Dual UHF with PMU (NO Software License Included)

Option to exclude SIF in second repeater exists, please refer to the Product Catalog or contact your L3Harris Representative for the configured part number.

E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9115H1DPH1DPA400	Rptr 400-440M D5/5W AC/12 conv SIF	\$ 13,372.00
S	TB9115H1DPH1DPC000	Rptr 400-440M D5/5W DC12/12 conv SIF	\$ 13,359.00
S	TB9115H1DPH1DPJ400	Rptr 400-440M D5/5W ACDC12/12 conv	\$ 13,984.00
S	TB9115H1DPH1HPA400	Rptr 400-440M D5/50W AC/12 conv SIF	\$ 14,161.00
S	TB9115H1DPH1HPC000	Rptr 400-440M D5/50W DC12/12 conv SIF	\$ 14,148.00
S	TB9115H1DPH1HPJ400	Rptr 400-440M D5/50W ACDC12/12 conv	\$ 14,773.00
S	TB9115H1HPH1HPA400	Rptr 400-440M D50/50W AC/12 conv SIF	\$ 14,950.00
S	TB9115H1HPH1HPC000	Rptr 400-440M D50/50W DC12/12 conv SIF	\$ 14,937.00
S	TB9115H1HPH1HPJ400	Rptr 400-440M D50/50W ACDC12/12 conv	\$ 15,562.00
S	TB9115H2DPH2DPA400	Rptr 440-480M D5/5W AC/12 conv SIF	\$ 13,372.00
S	TB9115H2DPH2DPC000	Rptr 440-480M D5/5W DC12/12 conv SIF	\$ 13,359.00
S	TB9115H2DPH2DPJ400	Rptr 440-480M D5/5W ACDC12/12 conv	\$ 13,984.00
S	TB9115H2DPH2HPA400	Rptr 440-480M D5/50W AC/12 conv SIF	\$ 14,161.00
S	TB9115H2DPH2HPC000	Rptr 440-480M D5/50W DC12/12 conv SIF	\$ 14,148.00
S	TB9115H2DPH2HPJ400	Rptr 440-480M D5/50W ACDC12/12 conv	\$ 14,773.00
S	TB9115H2HPH2HPA400	Rptr 440-480M D50/50W AC/12 conv SIF	\$ 14,950.00
S	TB9115H2HPH2HPC000	Rptr 440-480M D50/50W DC12/12 conv SIF	\$ 14,937.00
S	TB9115H2HPH2HPJ400	Rptr 440-480M D50/50W ACDC12/12 conv	\$ 15,562.00
S	TB9115H3DPH3DPA400	Rptr 470-520M D5/5W AC/12 conv SIF	\$ 13,372.00
S	TB9115H3DPH3DPC000	Rptr 470-520M D5/5W DC12/12 conv SIF	\$ 13,359.00
S	TB9115H3DPH3DPJ400	Rptr 470-520M D5/5W ACDC12/12 conv	\$ 13,984.00
S	TB9115H3DPH3HPA400	Rptr 470-520M D5/50W AC/12 conv SIF	\$ 14,161.00
S	TB9115H3DPH3HPC000	Rptr 470-520M D5/50W DC12/12 conv SIF	\$ 14,148.00
S	TB9115H3DPH3HPJ400	Rptr 470-520M D5/50W ACDC12/12 conv	\$ 14,773.00
S	TB9115H3HPH3HPA400	Rptr 470-520M D50/50W AC/12 conv SIF	\$ 14,950.00
S	TB9115H3HPH3HPC000	Rptr 470-520M D50/50W DC12/12 conv SIF	\$ 14,937.00
S	TB9115H3HPH3HPH000	Rptr 470-520M D50/50W DC48/24 conv SIF	\$ 14,937.00
S	TB9115H3HPH3HPJ400	Rptr 470-520M D50/50W ACDC12/12 conv	\$ 15,562.00
	Encrypted System Interface (SIF)		
S	TB9115H1DEH1DEA400	Rptr 400-440M D5/5W AC/12 Enc SIF	\$ 13,372.00
S	TB9115H1DEH1DEC000	Rptr 400-440M D5/5W DC12/12 Enc SIF	\$ 13,359.00
S	TB9115H1DEH1DEJ400	Rptr 400-440M D5/5W ACDC12/12 Enc SIF	\$ 13,984.00
S	TB9115H1DEH1HEA400	Rptr 400-440M D5/50W AC/12 Enc SIF	\$ 14,161.00
S	TB9115H1DEH1HEC000	Rptr 400-440M D5/50W DC12/12 Enc SIF	\$ 14,148.00
S	TB9115H1DEH1HEJ400	Rptr 400-440M D5/50W ACDC12/12 Enc SIF	\$ 14,773.00
S	TB9115H1HEH1HEA400	Rptr 400-440M D50/50W AC/12 Enc SIF	\$ 14,950.00
S	TB9115H1HEH1HEC000	Rptr 400-440M D50/50W DC12/12 Enc SIF	\$ 14,937.00
S	TB9115H1HEH1HEJ400	Rptr 400-440M D50/50W ACDC12/12 Enc	\$ 15,562.00
S	TB9115H2DEH2DEA400	Rptr 440-480M D5/5W AC/12 Enc SIF	\$ 13,372.00
S	TB9115H2DEH2DEC000	Rptr 440-480M D5/5W DC12/12 Enc SIF	\$ 13,359.00
S	TB9115H2DEH2DEJ400	Rptr 440-480M D5/5W ACDC12/12 Enc SIF	\$ 13,984.00
S	TB9115H2DEH2HEA400	Rptr 440-480M D5/50W AC/12 Enc SIF	\$ 14,161.00
S	TB9115H2DEH2HEC000	Rptr 440-480M D5/50W DC12/12 Enc SIF	\$ 14,148.00
S	TB9115H2DEH2HEJ400	Rptr 440-480M D5/50W ACDC12/12 Enc SIF	\$ 14,773.00
S	TB9115H2HEH2HEA400	Rptr 440-480M D50/50W AC/12 Enc SIF	\$ 14,950.00
S	TB9115H2HEH2HEC000	Rptr 440-480M D50/50W DC12/12 Enc SIF	\$ 14,937.00
S	TB9115H2HEH2HEJ400	Rptr 440-480M D50/50W ACDC12/12 Enc	\$ 15,562.00
S	TB9115H3DEH3DEA400	Rptr 470-520M D5/5W AC/12 Enc SIF	\$ 13,372.00
S	TB9115H3DEH3DEC000	Rptr 470-520M D5/5W DC12/12 Enc SIF	\$ 13,359.00
S	TB9115H3DEH3DEJ400	Rptr 470-520M D5/5W ACDC12/12 Enc SIF	\$ 13,984.00
S	TB9115H3DEH3HEA400	Rptr 470-520M D5/50W AC/12 Enc SIF	\$ 14,161.00
S	TB9115H3DEH3HEC000	Rptr 470-520M D5/50W DC12/12 Enc SIF	\$ 14,148.00
S	TB9115H3DEH3HEJ400	Rptr 470-520M D5/50W ACDC12/12 Enc SIF	\$ 14,773.00
S	TB9115H3HEH3HEA400	Rptr 470-520M D50/50W AC/12 Enc SIF	\$ 14,950.00
S	TB9115H3HEH3HEC000	Rptr 470-520M D50/50W DC12/12 Enc SIF	\$ 14,937.00
S	TB9115H3HEH3HEJ400	Rptr 470-520M D50/50W ACDC12/12 Enc	\$ 15,562.00
S	TB9115H4DEH4DEA400	Rptr 380-420M D5/5W AC/12 Enc SIF	\$ 13,372.00
S	TB9115H4DEH4DEC000	Rptr 380-420M D5/5W DC12/12 Enc SIF	\$ 13,359.00

S	TB9115H4DEH4DEJ400	Rptr 380-420M D5/5W ACDC12/12 Enc SIF	\$ 13,984.00
S	TB9115H4DEH4HEA400	Rptr 380-420M D5/50W AC/12 Enc SIF	\$ 14,161.00
S	TB9115H4DEH4HEC000	Rptr 380-420M D5/50W DC12/12 Enc SIF	\$ 14,148.00
S	TB9115H4DEH4HEJ400	Rptr 380-420M D5/50W ACDC12/12 Enc SIF	\$ 14,773.00
S	TB9115H4HEH4HEA400	Rptr 380-420M D50/50W AC/12 Enc SIF	\$ 14,950.00
S	TB9115H4HEH4HEC000	Rptr 380-420M D50/50W DC12/12 Enc SIF	\$ 14,937.00
S	TB9115H4HEH4HEJ400	Rptr 380-420M D50/50W ACDC12/12 Enc	\$ 15,562.00
	Trunking System Interface (SIF)		
S	TB9115H1DTH1DTA400	Rptr 400-440M D5/5W AC/12 trk SIF	\$ 13,372.00
S	TB9115H1DTH1DTC000	Rptr 400-440M D5/5W DC12/12 trk SIF	\$ 13,359.00
S	TB9115H1DTH1DTJ400	Rptr 400-440M D5/5W ACDC12/12 trk SIF	\$ 13,984.00
S	TB9115H1DTH1HTA400	Rptr 400-440M D5/50W AC/12 trk SIF	\$ 14,161.00
S	TB9115H1DTH1HTC000	Rptr 400-440M D5/50W DC12/12 trk SIF	\$ 14,148.00
S	TB9115H1DTH1HTJ400	Rptr 400-440M D5/50W ACDC12/12 trk SIF	\$ 14,773.00
S	TB9115H1HTH1HTA400	Rptr 400-440M D50/50W AC/12 trk SIF	\$ 14,950.00
S	TB9115H1HTH1HTC000	Rptr 400-440M D50/50W DC12/12 trk SIF	\$ 14,937.00
S	TB9115H1HTH1HTJ400	Rptr 400-440M D50/50W ACDC12/12 trk	\$ 15,562.00
S	TB9115H2DTH2DTA400	Rptr 440-480M D5/5W AC/12 trk SIF	\$ 13,372.00
S	TB9115H2DTH2DTC000	Rptr 440-480M D5/5W DC12/12 trk SIF	\$ 13,359.00
S	TB9115H2DTH2DTJ400	Rptr 440-480M D5/5W ACDC12/12 trk SIF	\$ 13,984.00
S	TB9115H2DTH2HTA400	Rptr 440-480M D5/50W AC/12 trk SIF	\$ 14,161.00
S	TB9115H2DTH2HTC000	Rptr 440-480M D5/50W DC12/12 trk SIF	\$ 14,148.00
S	TB9115H2DTH2HTJ400	Rptr 440-480M D5/50W ACDC12/12 trk SIF	\$ 14,773.00
S	TB9115H2HTH2HTA400	Rptr 440-480M D50/50W AC/12 trk SIF	\$ 14,950.00
S	TB9115H2HTH2HTC000	Rptr 440-480M D50/50W DC12/12 trk SIF	\$ 14,937.00
S	TB9115H2HTH2HTJ400	Rptr 440-480M D50/50W ACDC12/12 trk	\$ 15,562.00
S	TB9115H3DTH3DTA400	Rptr 470-520M D5/5W AC/12 trk SIF	\$ 13,372.00
S	TB9115H3DTH3DTC000	Rptr 470-520M D5/5W DC12/12 trk SIF	\$ 13,359.00
S	TB9115H3DTH3DTJ400	Rptr 470-520M D5/5W ACDC12/12 trk SIF	\$ 13,984.00
S	TB9115H3DTH3HTA400	Rptr 470-520M D5/50W AC/12 trk SIF	\$ 14,161.00
S	TB9115H3DTH3HTC000	Rptr 470-520M D5/50W DC12/12 trk SIF	\$ 14,148.00
S	TB9115H3DTH3HTJ400	Rptr 470-520M D5/50W ACDC12/12 trk SIF	\$ 14,773.00
S	TB9115H3HTH3HTA400	Rptr 470-520M D50/50W AC/12 trk SIF	\$ 14,950.00
S	TB9115H3HTH3HTC000	Rptr 470-520M D50/50W DC12/12 trk SIF	\$ 14,937.00
S	TB9115H3HTH3HTJ400	Rptr 470-520M D50/50W ACDC12/12 trk	\$ 15,562.00
S	TB9115H4DTH4DTA400	Rptr 380-420M D5/5W AC/12 trk SIF	\$ 13,372.00
S	TB9115H4DTH4DTC000	Rptr 380-420M D5/5W DC12/12 trk SIF	\$ 13,359.00
S	TB9115H4DTH4DTJ400	Rptr 380-420M D5/5W ACDC12/12 trk SIF	\$ 13,984.00
S	TB9115H4DTH4HTA400	Rptr 380-420M D5/50W AC/12 trk SIF	\$ 14,161.00
S	TB9115H4DTH4HTC000	Rptr 380-420M D5/50W DC12/12 trk SIF	\$ 14,148.00
S	TB9115H4DTH4HTJ400	Rptr 380-420M D5/50W ACDC12/12 trk SIF	\$ 14,773.00
S	TB9115H4HTH4HTA400	Rptr 380-420M D50/50W AC/12 trk SIF	\$ 14,950.00
S	TB9115H4HTH4HTC000	Rptr 380-420M D50/50W DC12/12 trk SIF	\$ 14,937.00
S	TB9115H4HTH4HTJ400	Rptr 380-420M D50/50W ACDC12/12 trk	\$ 15,562.00

TB9100 Dual 700/800MHz with PMU (NO Software License Included)

Option to exclude SIF in second repeater exists, please refer to the Product Catalog or contact your L3Harris Representative for the configured part number.

E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9115K4DPK4DPA400	Rptr 762-870M D5/5W AC/12 conv SIF	\$ 13,372.00
S	TB9115K4DPK4DPC000	Rptr 762-870M D5/5W DC12/12 conv SIF	\$ 13,359.00
S	TB9115K4DPK4DPJ400	Rptr 762-870M D5/5W ACDC12/12 conv	\$ 13,984.00
S	TB9115K4DPK4HPA400	Rptr 762-870M D5/50W AC/12 conv SIF	\$ 14,161.00
S	TB9115K4DPK4HPC000	Rptr 762-870M D5/50W DC12/12 conv SIF	\$ 14,148.00
S	TB9115K4DPK4HPJ400	Rptr 762-870M D5/50W ACDC12/12 conv	\$ 14,773.00
S	TB9115K4HPK4HPA400	Rptr 762-870M D50/50W AC/12 conv SIF	\$ 14,950.00
S	TB9115K4HPK4HPC000	Rptr 762-870M D50/50WDC12/12 conv SIF	\$ 14,937.00
S	TB9115K4HPK4HPJ400	Rptr 762-870M D50/50W ACDC12/12 conv	\$ 15,562.00
	Encrypted System Interface (SIF)		
S	TB9115K4DEK4DEA400	Rptr 762-870M D5/5W AC/12 Enc SIF	\$ 13,372.00
S	TB9115K4DEK4DEC000	Rptr 762-870M D5/5W DC12/12 Enc SIF	\$ 13,359.00
S	TB9115K4DEK4DEJ400	Rptr 762-870M D5/5W ACDC12/12 Enc SIF	\$ 13,984.00
S	TB9115K4DEK4HEA400	Rptr 762-870M D5/50W AC/12 Enc SIF	\$ 14,161.00
S	TB9115K4DEK4HEC000	Rptr 762-870M D5/50W DC12/12 Enc SIF	\$ 14,148.00
S	TB9115K4DEK4HEJ400	Rptr 762-870M D5/50W ACDC12/12 Enc SIF	\$ 14,773.00
S	TB9115K4HEK4HEA400	Rptr 762-870M D50/50W AC/12 Enc SIF	\$ 14,950.00
S	TB9115K4HEK4HEC000	Rptr 762-870M D50/50WDC12/12 Enc SIF	\$ 14,937.00
S	TB9115K4HEK4HEJ400	Rptr 762-870M D50/50W ACDC12/12 Enc	\$ 15,562.00
	Trunking System Interface (SIF)		
S	TB9115K4DTK4DTA400	Rptr 762-870M D5/5W AC/12 trk SIF	\$ 13,372.00
S	TB9115K4DTK4DTC000	Rptr 762-870M D5/5W DC12/12 trk SIF	\$ 13,359.00
S	TB9115K4DTK4DTJ400	Rptr 762-870M D5/5W ACDC12/12 trk SIF	\$ 13,984.00
S	TB9115K4DTK4HTA400	Rptr 762-870M D5/50W AC/12 trk SIF	\$ 14,161.00
S	TB9115K4DTK4HTC000	Rptr 762-870M D5/50W DC12/12 trk SIF	\$ 14,148.00
S	TB9115K4DTK4HTJ400	Rptr 762-870M D5/50W ACDC12/12 trk SIF	\$ 14,773.00
S	TB9115K4HTK4HTA400	Rptr 762-870M D50/50W AC/12 trk SIF	\$ 14,950.00
S	TB9115K4HTK4HTC000	Rptr 762-870M D50/50WDC12/12 trk SIF	\$ 14,937.00
S	TB9115K4HTK4HTJ400	Rptr 762-870M D50/50W ACDC12/12 trk	\$ 15,562.00

TB9100 Single VHF with 12VDC PA no PMU (NO Software License Included)

E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9125B2QP00000000	Rptr 136-156M 5W 12V PA conv SIF	\$ 6,342.00
S	TB9125B2RP00000000	Rptr 136-156M 50W 12V PA conv SIF	\$ 7,131.00
S	TB9125B3QP00000000	Rptr 148-174M 5W 12V PA conv SIF	\$ 6,342.00
S	TB9125B3RP00000000	Rptr 148-174M 50W 12V PA conv SIF	\$ 7,131.00

TB9100 Single UHF with 12VDC PA no PMU (NO Software License Included)

E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9125H1QP00000000	Rptr 400-440M 5W 12V PA conv SIF	\$ 6,342.00
S	TB9125H1RP00000000	Rptr 400-440M 50W 12V PA conv SIF	\$ 7,131.00
S	TB9125H2QP00000000	Rptr 440-480M 5W 12V PA conv SIF	\$ 6,342.00
S	TB9125H2RP00000000	Rptr 440-480M 50W 12V PA conv SIF	\$ 7,131.00
S	TB9125H3QP00000000	Rptr 470-520M 5W 12V PA conv SIF	\$ 6,342.00
S	TB9125H3RP00000000	Rptr 470-520M 50W 12V PA conv SIF	\$ 7,131.00
S	TB9125H4QP00000000	Rptr 380-420M 5W 12V PA conv SIF	\$ 6,342.00
S	TB9125H4RP00000000	Rptr 380-420M 50W 12V PA conv SIF	\$ 7,131.00

TB9100 Single 700/800MHz with 12VDC PA no PMU (NO Software License Included)

E/C	Item Code	Description	List Price
	Conventional System Interface (SIF)		
S	TB9125K4QP00000000	Rptr 762-870M 5W 12V PA conv SIF	\$ 6,342.00
S	TB9125K4RP00000000	Rptr 762-870M 50W 12V PA conv SIF	\$ 7,131.00

TB9100 - Single VHF Receive Only with PMU no Power Amplifier - (NO Software License Included)

Single receiver configurations shown below - for multiple receivers contact your L3Harris Representative for the configured part number

E/C	Item Code	Description	List Price
	Conventional SIF		
S	TB9145B21P0000A400	Rx Only 136-156M AC/12 cord conv SIF	\$ 5,726.00
S	TB9145B21P0000C000	Rx Only 136-156M DC12/12 conv SIF	\$ 5,713.00
S	TB9145B21P0000J400	Rx Only 136-156M ACDC12/12 conv SIF	\$ 6,338.00
S	TB9145B31P0000A400	Rx Only 148-174M AC/12 conv SIF	\$ 5,726.00
S	TB9145B31P0000C000	Rx Only 148-174M DC12/12 conv SIF	\$ 5,713.00
S	TB9145B31P0000J400	Rx Only 148-174M ACDC12/12 conv SIF	\$ 6,338.00
	Trunking SIF		
S	TB9145B21T0000A400	Rx Only 136-156M AC/12 trk SIF	\$ 5,726.00
S	TB9145B21T0000C000	Rx Only 136-156M DC12/12 trk SIF	\$ 5,713.00
S	TB9145B21T0000J400	Rx Only 136-156M ACDC12/12 trk SIF	\$ 6,338.00
S	TB9145B31T0000A400	Rx Only 148-174M AC/12 trk SIF	\$ 5,726.00
S	TB9145B31T0000C000	Rx Only 148-174M DC12/12 trk SIF	\$ 5,713.00
S	TB9145B31T0000J400	Rx Only 148-174M ACDC12/12 trk SIF	\$ 6,338.00

TB9100 Single UHF Receive Only with PMU no Power Amplifier (NO Software License Included)

Single receiver configurations shown below - for multiple receivers contact your L3Harris Representative for the configured part number

E/C	Item Code	Description	List Price
	Conventional SIF		
S	TB9145H11P0000A400	Rx Only 400-440M AC/12 conv SIF	\$ 5,726.00
S	TB9145H11P0000C000	Rx Only 400-440M DC12/12 conv SIF	\$ 5,713.00
S	TB9145H11P0000J400	Rx Only 400-440M ACDC12/12 conv SIF	\$ 6,338.00
S	TB9145H21P0000A400	Rx Only 440-480M AC/12 conv SIF	\$ 5,726.00
S	TB9145H21P0000C000	Rx Only 440-480M DC12/12 conv SIF	\$ 5,713.00
S	TB9145H21P0000J400	Rx Only 440-480M ACDC12/12 conv SIF	\$ 6,338.00
S	TB9145H31P0000A400	Rx Only 470-520M AC/12 conv SIF	\$ 5,726.00
S	TB9145H31P0000C000	Rx Only 470-520M DC12/12 conv SIF	\$ 5,713.00
S	TB9145H31P0000J400	Rx Only 470-520M ACDC12/12 conv SIF	\$ 6,338.00
S	TB9145H41P0000A400	Rx Only 380-420M AC/12 conv SIF	\$ 5,726.00
S	TB9145H41P0000C000	Rx Only 380-420M DC12/12 conv SIF	\$ 5,713.00
S	TB9145H41P0000J400	Rx Only 380-420M ACDC12/12 conv SIF	\$ 6,338.00
	Trunking SIF		
S	TB9145H11T0000A400	Rx Only 400-440M AC/12 trk SIF	\$ 5,726.00
S	TB9145H11T0000C000	Rx Only 400-440M DC12/12 trk SIF	\$ 5,713.00
S	TB9145H11T0000J400	Rx Only 400-440M ACDC12/12 trk SIF	\$ 6,338.00
S	TB9145H21T0000A400	Rx Only 440-480M AC/12 trk SIF	\$ 5,726.00
S	TB9145H21T0000C000	Rx Only 440-480M DC12/12 trk SIF	\$ 5,713.00
S	TB9145H21T0000J400	Rx Only 440-480M ACDC12/12 trk SIF	\$ 6,338.00
S	TB9145H31T0000A400	Rx Only 470-520M AC/12 trk SIF	\$ 5,726.00
S	TB9145H31T0000C000	Rx Only 470-520M DC12/12 trk SIF	\$ 5,713.00
S	TB9145H31T0000J400	Rx Only 470-520M ACDC12/12 trk SIF	\$ 6,338.00
S	TB9145H41T0000A400	Rx Only 380-420M AC/12 trk SIF	\$ 5,726.00
S	TB9145H41T0000C000	Rx Only 380-420M DC12/12 trk SIF	\$ 5,713.00
S	TB9145H41T0000J400	Rx Only 380-420M ACDC12/12 trk SIF	\$ 6,338.00

TB9100 Single 700/800MHz Receive Only with PMU no Power Amplifier (NO Software License Included)

Single receiver configurations shown below - for multiple receivers contact your L3Harris Representative for the configured part number

E/C	Item Code	Description	List Price
	Conventional SIF		
S	TB9145K41P0000A400	Rx Only 762-870M AC/12 conv SIF	\$ 5,726.00
S	TB9145K41P0000C000	Rx Only 762-870M DC12/12 conv SIF	\$ 5,713.00
S	TB9145K41P0000J400	Rx Only 762-870M ACDC12/12 conv SIF	\$ 6,338.00
	Trunking SIF		
S	TB9145K41T0000A400	Rx Only 762-870M AC/12 trk SIF	\$ 5,726.00
S	TB9145K41T0000C000	Rx Only 762-870M DC12/12 trk SIF	\$ 5,713.00
S	TB9145K41T0000J400	Rx Only 762-870M ACDC12/12 trk SIF	\$ 6,338.00

TB9100 Single VHF Receive Only no PMU or Power Amplifier (NO Software License Included)

E/C	Item Code	Description	List Price
	Conventional SIF		
S	TB9147B21P00000000	Rx Only 136-156M 12VDC conv SIF	\$ 3,824.00
S	TB9147B31P00000000	Rx Only 148-174M 12VDC conv SIF	\$ 3,824.00
	Trunking SIF		
S	TB9147B21T00000000	Rx Only 136-156M 12VDC trk SIF	\$ 3,824.00
S	TB9147B31T00000000	Rx Only 148-174M 12VDC trk SIF	\$ 3,824.00

TB9100 Single UHF Receive Only no PMU or Power Amplifier (NO Software License Included)

E/C	Item Code	Description	List Price
	Conventional SIF		
S	TB9147H11P00000000	Rx Only 400-440M 12VDC conv SIF	\$ 3,824.00
S	TB9147H21P00000000	Rx Only 440-480M 12VDC conv SIF	\$ 3,824.00
S	TB9147H31P00000000	Rx Only 470-520M 12VDC conv SIF	\$ 3,824.00
S	TB9147H41P00000000	Rx Only 380-420M 12VDC conv SIF	\$ 3,824.00
	Trunking SIF		
S	TB9147H11T00000000	Rx Only 400-440M 12VDC trk SIF	\$ 3,824.00
S	TB9147H21T00000000	Rx Only 440-480M 12VDC trk SIF	\$ 3,824.00
S	TB9147H31T00000000	Rx Only 470-520M 12VDC trk SIF	\$ 3,824.00
S	TB9147H41T00000000	Rx Only 380-420M 12VDC trk SIF	\$ 3,824.00

TB9100 Single 700/800MHz Receive Only no PMU or Power Amplifier (NO Software License Included)

E/C	Item Code	Description	List Price
	Conventional SIF		
S	TB9147K41P00000000	Rx Only 762-870M 12VDC conv SIF	\$ 3,824.00
	Trunking SIF		
S	TB9147K41T00000000	Rx Only 762-870M 12VDC trk SIF	\$ 3,824.00

TB9100 Transportable VHF Repeater with Lightning Arrestor

Note: Pricing includes Duplexer. Please contact your L3Harris representative for other Duplexer options and colors.

E/C	Item Code	Description	List Price
S	TB9108B2RPDA00Z400	Trans Rpt 136-156M 50W sp4-6M ACDC12	\$ 15,310.00
S	TB9108B2RPDA00Z4AA	Trans Rpt P25 136-156M 50W sp4-6M ACDC12	\$ 21,760.00
S	TB9108B3RPDD00Z400	Trans Rpt 152-174M 50W sp4-6M ACDC12	\$ 15,310.00
S	TB9108B3RPDD00Z4AA	Trans Rpt P25 152-174M 50W sp4-6M ACDC12	\$ 21,760.00

TB9100 Transportable UHF Repeater with Lightning Arrestor

Note: Pricing includes Duplexer. Please contact your L3Harris representative for other Duplexer options and colors.

E/C	Item Code	Description	List Price
S	TB9108H1RPDG00Z400	Trans Rpt 400-440M 50W sp5-7M ACDC12	\$ 15,310.00
S	TB9108H1RPDG00Z4AA	Trans Rpt P25 400-440M 50W sp5-7M ACDC12	\$ 21,760.00
S	TB9108H2RPDG00Z400	Trans Rpt 440-480M 50W sp5-7M ACDC12	\$ 15,310.00
S	TB9108H2RPDG00Z4AA	Trans Rpt P25 440-480M 50W sp5-7M ACDC12	\$ 21,760.00
S	TB9108H3RPDH00Z400	Trans Rpt 470-520M 50W sp7-9M ACDC12	\$ 15,310.00
S	TB9108H3RPDH00Z4AA	Trans Rpt P25 470-520M 50W sp7-9M ACDC12	\$ 21,760.00
S	TB9108H4RPDH00Z400	Trans Rpt 380-420M 50W sp7-9M ACDC12	\$ 15,310.00
S	TB9108H4RPDH00Z4AA	Trans Rpt P25 380-420M 50W sp7-9M ACDC12	\$ 21,760.00

P25 Digital Base Station - Software Feature Options

TB9100 - Software Licenses

E/C	Item Code	Description	List Price
S	TBAKEY01	TB9100 Software License Installer	\$ 352.00
S	TBAS050	SFE P25 Common Air Interface (CAI)	\$ 6,450.00
S	TBAS051	SFE Key - Analog Line (TB91) (TBAS050 prerequisite)	\$ 95.00
S	TBAS054	SFE MDC1200 Signaling on Analog Line	\$ 262.00
S	TBAS056	SFE P25 Trunking Operation (TB91/94)	\$ 5,386.00
S	TBAS057	SFE P25 Base Enc & Key Loading	\$ 1,047.00
S	TBAS058	SFE Key - P25 AES Enc (TB91)	\$ 1,047.00
S	TBAS060	SFE Digital Fixed Station Interface	\$ 523.00
S	TBAS061	SFE Key - Central Voter (TB91/94) (TBAS067 prerequisite)	\$ 4,826.00
S	TBAS062	SFE Key - Simulcast Enable (TB91/94)	\$ 4,730.00
S	TBAS063	SFE Failsoft for P25 Trunking (TB91/94)	\$ 508.00
S	TBAS064	SFE Key - CSSI Connection (91)	\$ 541.00
S	TBAS067	SFE Transceiver Networking (TB91/94)	\$ 788.00

TB9100 - Receive-only Software Licenses

S	TBAS050-R0	SFE P25 Common Air Interface (CAI)	\$ 3,225.00
S	TBAS051-R0	SFE Key - Analog Line	\$ 49.00
S	TBAS054-R0	SFE Key - MDC1200 Signaling on Anlg Line	\$ 131.00
S	TBAS056-R0	SFE Key - P25 Trunking Operation	\$ 2,693.00
S	TBAS057-R0	SFE Key - P25 Base Encrp & Key Loading	\$ 541.00
S	TBAS057-R0	SFE Key - P25 Base Encrp & Key Loading	\$ 541.00
S	TBAS058-R0	SFE Key - P25 AES Encryption	\$ 541.00
S	TBAS060-R0	SFE Key - Digital Fix Station Interface	\$ 271.00
S	TBAS061-R0	SFE Key - TB91/94 Central Voter Rx Only	\$ 2,497.00

P25 Digital Base Station - Spares

TB9100 Spares - Reciters (Receiver/Exciter) VHF/UHF

E/C	Item Code	Description	List Price
S	TBA40B2-PA00	Conventional Reciter 136-156M	\$ 5,300.00
S	TBA40B3-PA00	Conventional Reciter 148-174M	\$ 5,300.00
S	TBA40H1-PA00	Conventional Reciter 400-440M	\$ 5,300.00
S	TBA40H2-PA00	Conventional Reciter 440-480M	\$ 5,300.00
S	TBA40H3-PA00	Conventional Reciter 470-520M	\$ 5,300.00
S	TBA40H4-PA00	Conventional Reciter 380-420M	\$ 5,300.00
S	TBA40K4-PA00	Conventional Reciter 762-870M	\$ 5,300.00
S	TBA40B2-PAC0	Conventional Reciter Enced 136-156M	\$ 5,300.00
S	TBA40B3-PAC0	Conventional Reciter Enced 148-174M	\$ 5,300.00
S	TBA40H1-PAC0	Conventional Reciter Enced 400-440M	\$ 5,300.00
S	TBA40H2-PAC0	Conventional Reciter Enced 440-480M	\$ 5,300.00
S	TBA40H3-PAC0	Conventional Reciter Enced 470-520M	\$ 5,300.00
S	TBA40H4-PAC0	Conventional Reciter Enced 380-420M	\$ 5,300.00
S	TBA40K4-PAC0	Conventional Reciter Enced 762-870M	\$ 5,300.00
S	TBA40B2-PB00	Base Station Trunking Reciter 136-156MHz	\$ 5,300.00
S	TBA40B3-PB00	Base Station Trunking Reciter 148-174MHz	\$ 5,300.00
S	TBA40H1-PB00	Base Station Trunking Reciter 400-440MHz	\$ 5,300.00
S	TBA40H2-PB00	Base Station Trunking Reciter 440-480MHz	\$ 5,300.00
S	TBA40H3-PB00	Base Station Trunking Reciter 470-520MHz	\$ 5,300.00
S	TBA40H4-PB00	Base Station Trunking Reciter 380-420MHz	\$ 5,300.00
S	TBA40K4-PB00	Base Station Trunking Reciter 762-870MHz	\$ 5,300.00
S	TBA50B2-PA00	Reciter Rx Only 136-156M	\$ 3,533.00
S	TBA50B3-PA00	Reciter Rx Only 148-174M	\$ 3,533.00
S	TBA50H1-PA00	Reciter Rx Only 400-440M	\$ 3,533.00
S	TBA50H2-PA00	Reciter Rx Only 440-480M	\$ 3,533.00
S	TBA50H3-PA00	Reciter Rx Only 470-520M	\$ 3,533.00
S	TBA50H4-PA00	Reciter Rx Only 380-420M	\$ 3,533.00
S	TBA50K4-PA00	Reciter Rx Only 762-870M	\$ 3,533.00
S	TBA50B2-PAC0	Reciter Rx Only Enced 136-156M	\$ 3,533.00
S	TBA-SP-R5B3PAC	Reciter Rx Only Enced 148-174M	\$ 8,617.07
S	TBA50H1-PAC0	Reciter Rx Only Enced 400-440M	\$ 3,533.00
S	TBA50H2-PAC0	Reciter Rx Only Enced 440-480M	\$ 3,533.00
S	TBA50H3-PAC0	Reciter Rx Only Enced 470-520M	\$ 3,533.00
S	TBA50H4-PAC0	Reciter Rx Only Enced 380-420M	\$ 3,533.00
S	TBA50K4-PAC0	Reciter Rx Only Enced 762-870M	\$ 3,533.00
S	TBA50B2-PB00	Trunking Reciter Receive only 136-156M	\$ 3,533.00
S	TBA50B3-PB00	Trunking Reciter Receive only 148-174M	\$ 3,533.00
S	TBA50H1-PB00	Trunking Reciter Receive only 400-440M	\$ 3,533.00
S	TBA50H2-PB00	Trunking Reciter Receive only 440-480M	\$ 3,533.00
S	TBA50H3-PB00	Trunking Reciter Receive only 470-520M	\$ 3,533.00
S	TBA50H4-PB00	Trunking Reciter Receive only 380-420M	\$ 3,533.00
S	TBA50K4-PB00	Trunking Reciter Receive only 762-870M	\$ 3,533.00

TB9100 Spares - Spare Front Panels

E/C	Item Code	Description	List Price
S	TBA-SP-F2130	TB8/TB9 Spare Front Pnl No Fans / Label	\$ 227.00
S	TBA-SP-F2132	TB81/TB91 Spare Front Panel 2xFans/Label	\$ 357.00
S	TBA-SP-F2135	TB8/TB9 Spare Front Pnl PA Fan/No Label	\$ 303.00
S	TBA-SP-F2136	TB8/TB9 Spare Front Pnl PMU Fan/No Label	\$ 357.00

TB9100 Spares - Spare Control Panels

E/C	Item Code	Description	List Price
S	TBA-SP-2060	TB8/TB9 Spare Multi Reciter Control Pnl	\$ 369.00

TB9100 - Auxiliary Power Cord

E/C	Item Code	Description	List Price
S	TBAA04-05	TB81/TB91 Dual Chnl Aux Pwr Cbl 2way Kit	\$ 45.00

TB9100 Spares - Power Amplifiers (PA)

E/C	Item Code	Description	List Price
S	TBA70B1-0000	TB81/TB91 Power Amplifier 136-174M 5W	\$ 2,004.00
S	TBA70H0-0000	TB81/TB91 Power Amplifier 380-520M 5W	\$ 2,004.00
S	TBA70K2-0000	TB81/TB91 Power Amplifier 762-870M 5W	\$ 2,004.00
S	TBA80B1-0000	TB81/TB91 Power Amplifier 136-174M 50W	\$ 3,132.00
S	TBA80H0-0000	TB81/TB91 Power Amplifier 380-520M 50W	\$ 3,132.00
S	TBA80K2-0000	TB81/TB91 Power Amplifier 762-870M 50W	\$ 3,132.00
S	TBA90B1-0000	TB81/TB91 Power Amplifier 136-174M 100W	\$ 4,218.00
S	TBA90H0-0000	TB81/TB91 Power Amplifier 380-520M 100W	\$ 4,218.00
S	TBA90K2-0000	TB81/TB91 Power Amplifier 762-870M 100W	\$ 4,218.00

TB9100 Spares - Power Amplifiers (PA) - 12VDC

E/C	Item Code	Description	List Price
S	TBA71B1-0000	TB81/TB91 PowerAmp 136-174M 5W 12VDC	\$ 2,004.00
S	TBA71H0-0000	TB81/TB91 PowerAmp 380-520M 5W 12VDC	\$ 2,004.00
S	TBA71K2-0000	TB81/TB91 PowerAmp 762-870M 5W 12VDC	\$ 2,004.00
S	TBA81B1-0000	TB81/TB91 PowerAmp 136-174M 50W 12VDC	\$ 3,132.00
S	TBA81H0-0000	TB81/TB91 PowerAmp 380-520M 50W 12VDC	\$ 3,132.00
S	TBA81K2-0000	TB81/TB91 PowerAmp 762-870M 50W 12VDC	\$ 3,132.00

TB9100 Spares - Power Management Units (PMU) - AC

E/C	Item Code	Description	List Price
S	TBA30A0-0100	PMU, TB9000, AC Aux12	\$ 1,889.00
S	TBA30A0-0200	PMU, TB9000, AC Aux24	\$ 1,889.00
S	TBA30A0-0400	PMU, TB9000, AC Aux48	\$ 1,889.00

TB9100 Spares - Power Management Units (PMU)

E/C	Item Code	Description	List Price
S	TBA3001-1100	PMU, TB9000, 12VDC Aux12V	\$ 1,889.00
S	TBA3001-1200	PMU, TB9000, 12VDC Aux24V	\$ 1,889.00
S	TBA3001-1400	PMU, TB9000, 12VDC Aux48V	\$ 1,889.00
S	TBA3002-2100	PMU, TB9000, 24VDC Aux12V	\$ 1,889.00
S	TBA3002-2200	PMU, TB9000, 24VDC Aux24V	\$ 1,889.00
S	TBA3002-2400	PMU, TB9000, 24VDC Aux48V	\$ 1,889.00
S	TBA3004-4100	PMU, TB9000, 48VDC Aux12V	\$ 1,889.00
S	TBA3004-4200	PMU, TB9000, 48VDC Aux24V	\$ 1,889.00
S	TBA3004-4400	PMU, TB9000, 48VDC Aux48V	\$ 1,889.00

TB9100 Spares - Power Management Units (PMU) - ACDC

E/C	Item Code	Description	List Price
S	TBA30A1-1100	PMU, TB9000, 12VACDC Aux12V	\$ 2,501.00
S	TBA30A1-1200	PMU, TB9000, 12VACDC Aux24V	\$ 2,501.00
S	TBA30A1-1400	PMU, TB9000, 12VACDC Aux48V	\$ 2,501.00
S	TBA30A2-2100	PMU, TB9000, 24VACDC Aux12V	\$ 2,501.00
S	TBA30A2-2200	PMU, TB9000, 24VACDC Aux24V	\$ 2,501.00
S	TBA30A2-2400	PMU, TB9000, 24VACDC Aux48V	\$ 2,501.00
S	TBA30A4-4100	PMU, TB9000, 48VACDC Aux12V	\$ 2,501.00
S	TBA30A4-4200	PMU, TB9000, 48VACDC Aux24V	\$ 2,501.00
S	TBA30A4-4400	PMU, TB9000, 48VACDC Aux48V	\$ 2,501.00

TB9100 Spares - Power Management Units (PMU) Option Boards

E/C	Item Code	Description	List Price
S	TBA-SP-WDA1	Spare PMU Auxiliary Supply 12VDC 40W	\$ 245.00
S	TBA-SP-WDA2	Spare PMU Auxiliary Supply 24VDC 40W	\$ 245.00
S	TBA-SP-WDA4	Spare PMU Auxiliary Supply 48VDC 40W	\$ 245.00

P25 Digital Base Station - Accessories**TB9100 - Mic**

E/C	Item Code	Description	List Price
S	T02-00005-AAAC	Standard Microphone	\$ 80.00

TB9100 - Adaptor Front Panel

E/C	Item Code	Description	List Price
S	TBA60C0	TB9100 Adaptor Front Panel 1U RJ45	\$ 265.00
S	TBA60C2	TB91 Adptr Frnt Panel 1U RJ45 2 Shrt RJ4	\$ 210.00

TB9100 - Coaxial Relay Assembly

E/C	Item Code	Description	List Price
S	TBAA03-15	TB91 Relay Coax Assembly + Mounting Brkt	\$ 640.00

TB9100 - Programming

E/C	Item Code	Description	List Price
S	TBA0P20	TB9100 Crossover & Audio Cables	\$ 103.00

TB9100 - Power Cords

E/C	Item Code	Description	List Price
S	T952-340	Mains Power Lead/CAN IEC	\$ 27.00

TB9100 - Support Brackets & Handles

E/C	Item Code	Description	List Price
S	TBAA03-13	TB8000/9000 Auxiliary Support Bracket	\$ 35.00
S	TBAA03-16	TB8000/9000 Carrying Handles	\$ 43.00

TB9100 - Cabinets - (Crate must be ordered separately \$500)

E/C	Item Code	Description	List Price
S	T-C08U19L-00	Cab 8U 19" 600x600mm Front & Rear Doors - (crate not included, must order 1 crate per cabinet)	\$ 1,817.00
S	T-C12U19L-00	Cab 12U 19" 600x600mm Front & Rear Doors - (crate not included, must order 1 crate per cabinet)	\$ 2,256.00
S	T-C25U19L-00	Cab 25U 19" 600x600mm Front & Rear Doors - (crate not included, must order 1 crate per cabinet)	\$ 2,454.00
S	T-C38U19L-00	Cab 38U 19" 600x600mm Front & Rear Doors - (crate not included, must order 1 crate per cabinet)	\$ 2,785.00
S	T-C45U19L-00	Cab 45U 19" 600x600mm Front & Rear Doors - (crate not included, must order 1 crate per cabinet)	\$ 2,956.00

TB9100 - Service Kit

E/C	Item Code	Description	List Price
S	TBA0STU	BaseStation Calibration Test Unit & Cord	\$ 1,700.00
S	TBA0ST2	Base Station Tool Kit	\$ 575.00

TB9100 - Misc

E/C	Item Code	Description	List Price
S	TA2768-01	DC Combiner assy 6Way Mount Din35 Rail	\$ 157.00

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TN9400 Radio Networks – P25

► TaitNet P25 Systems (Trunked Phase 1 & Phase 2)

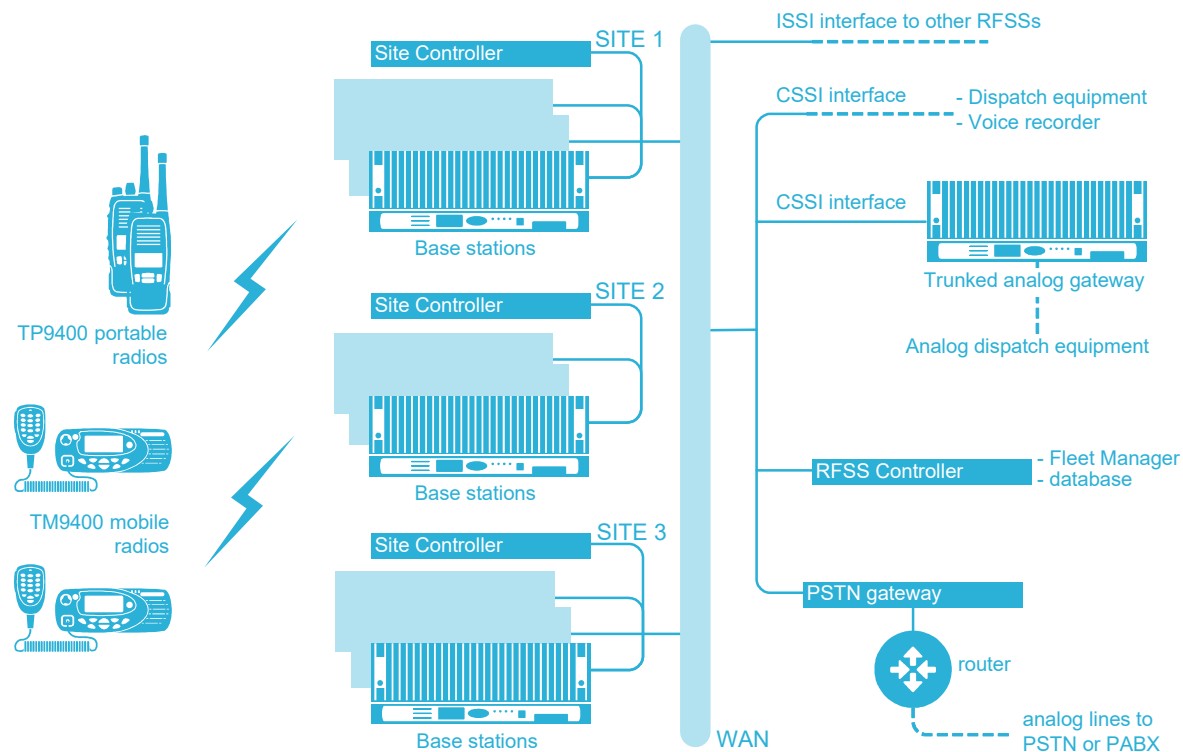


TaitNet P25 Phase1 or Phase2

Overview

The TN9400 P25 trunked network is an IP-based digital system specifically designed to provide P25 compliant mission-critical communications.

Its design is highly flexible and scalable, allowing Public Safety and Public Service users to deploy a cost-effective infrastructure that meets their mobile communication needs now and into the future.



P25 Phase1/Phase2 Operation

Tait P25 Systems are available in either mode of operation: P25 Phase1 or P25 Phase 2.

Phase2 introduces TDMA, in addition to Phase1 FDMA, therefore when purchasing a Phase2 system all Phase1 and Phase2 enable licences are required.

Enhanced simulcast coverage with Linear Simulcast Mode (LSM)

Simulcast trunking combines the benefits of maximum simulcast coverage with the frequency efficiency of trunking – a double win. An additional choice is to transmit in LSM, which significantly increases the maximum geographic spacing between simulcast sites with the benefit being that some sites can be eliminated.

When purchasing a Phase2 Simulcast system, Phase1 LSM is highly recommended as Phase1 C4FM Simulcast is not as efficient.

Note: LSM requires use of the TB9400

Redundancy

- ▶ Continuity of operation is paramount and a Tait P25 trunking system is designed to operate through many possible outage scenarios. High Availability ensures that your fleet registration information is constantly maintained in a reserve Radio Frequency Subsystem (RFSS) server for use if the primary server should ever fail. A “hot-standby” ensures a rapid and near seamless change over.
- ▶ Additional redundancy occurs as a result of sites being able to operate in an “isolated site” trunking mode, should the network connection to a site become disconnected.

Scalable networks

A TaitNet P25 trunking system may be scaled up or down depending on your coverage needs – for many sites or few sites, high or low site capacity, simulcast trunking or not.

Standardized Interconnections

Tait support for open standards enables choice and flexibility for our customers. This is demonstrated with support for consoles being via the standardized Console Subsystem Interface (CSSI).

TaitNet P25 Trunked Access for Single Site System

Overview

The P25 Trunked Access TN9400 Solution corresponds to a P25 Trunked Single Logical Site system, with both RFSS and Site Controller applications located in a single server (Mid-Level Dell R230 server). This server is also used in a High Availability redundant configuration to ensure the system critical communication fundamental redundancy requirement.

In simulcast, the P25 Access system can be composed of one logical site and multiple physical sites.

A specific P25 Access software operating licence is enabling this type of solution (TNAS521).

Initial limitation of the first release P25 Access R1.0

If your customer need is beyond these indicative limits, please contact the Product Manager.

- System capacity: 15 channels (i.e. 5 sites, 3 channels or 1 site, 15 channels).
- CSSI connections: 2
- No ISSI connections
- No multi-agencies

Features and scalability

- ▶ The P25 Access software is common with the full standard P25 main stream software. Therefore, any migration to P25 full standard is a pure software upgrade.
- ▶ It also means that all features are applicable, within the limitations mentioned above.
- ▶ The P25 Access solution is capable to operate in P25 Trunked Phase1 and Phase2 and LSM simulcast.
- ▶ It is designed as a smart, simple and cost effective step into P25 Trunking.
- ▶ It is made easy to install, maintain and operate with a guaranteed future path to greater larger systems.

NOTE: Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.

TN9400

Product Codes for Commercial Ordering

Edition: 06

Controllers



RFSS Controller Options

Stand Alone RFSS

T01-00023-BAAA TND P25 - RFSS Controller SA AC Standard
T01-00023-BBAA TND P25 - RFSS Controller SA 48VDC Standard

High Availability RFSS

T01-00023-AAAA TND P25 - RFSS Controller HA AC Standard
T01-00023-ABAA TND P25 - RFSS Controller HA 48VDC Standard

Site Controller Options

Stand Alone Site

T01-00024-BAAA TND P25 - Site Controller SA AC Standard
T01-00024-BBAA TND P25 - Site Controller SA 48VDC Standard

High Availability Site

T01-00024-AAAA TND P25 - Site Controller HA AC Standard
T01-00024-ABAA TND P25 - Site Controller HA 48VDC Standard

Access RFSS, Site Controller and High Availability Option

TN9400110100000000 TND P25 - Access RFSS & Site & H/A Controller AC

PSTN Gateways

T01-00027-BAAA TND P25 - PSTN Gateway SA AC Standard
T01-00027-BBAA TND P25 - PSTN Gateway SA 48VDC Standard

Licences

Tn9400 Licence Options

RFSS Controller Licence

TNAS500 Licence TaitNet P25 - RFSS Controller Stand Alone
TNAS501 Licence TaitNet P25 - RFSS Controller High Availability
TNAS502 Licence TaitNet P25 - EnableIP
TNAS505 Licence TaitNet P25 - CSSI Console System
TNAS506 Licence TaitNet P25 - ISSI Voice Recorder
TNAS507 Licence TaitNet P25 - ISSI Intra System Phase 1
TNAS516 Licence TaitNet P25 - System Transceiver Resource
TNAS519 Licence TaitNet P25 - System Transceiver Resource (TAP only)

Site Controller Licence

TNAS510 Licence TaitNet P25 - Site Controller Stand Alone Phase 1
TNAS511 Licence TaitNet P25 - Simulcast Site Controller Phase 1
TNAS512 Licence TaitNet P25 - Site Controller High Availability
TNAS513 Licence TaitNet P25 - Site Controller Stand Alone Phase 2
TNAS514 Licence TaitNet P25 - Simulcast Site Controller Phase 2

Access RFSS and Site Controller and High Availability Licence

TNAS521 Licence TaitNet P25 - Access

PSTN and Analog Gateway Licence

TNAS509 Licence TaitNet P25 - Trunked Analog Gateway Phase 1
TNAS515 Licence TaitNet P25 - Trunked PSTN Gateway Service Phase 1

Power Cords



Power Cord Cable Options

IEC Cables

219-03234-00 Power Cord Cable 1M IEC(Female) to IEC(Male)
219-03235-00 Power Cord Cable 2M IEC(Female) to IEC(Male)
219-03236-00 Power Cord Cable 3M IEC(Female) to IEC(Male)

Example of: TN9400 Single RFSS Stand Alone with x2 Sites with x4 Channel each and Single Trunked PSTN Gateway AC in Cabinet configuration

Stand Alone RFSS

T01-00023-BAAA TND P25 - RFSS Controller SA AC Standard x1

Stand Alone Site

T01-00024-BAAA TND P25 - Site Controller SA AC Standard x2

Stand Alone PSTN

T01-00027-BAAA TND P25 - PSTN Gateway SA AC Standard x1

RFSS Controller Licence

TNAS500 Licence TaitNet P25 - RFSS Controller Stand Alone x1
TNAS516 Licence TaitNet P25 - System Transceiver Resource x8

Site Controller Licence

TNAS510 Licence TaitNet P25 - Site Controller Stand Alone Phase 1 x2

PSTN Gateway Licence

TNAS515 Licence TaitNet P25 - Trunked PSTN Gateway Service x1

IEC Cables

219-03235-00 Power Cord Cable 2M IEC(Female) to IEC(Male) x4

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Doc ID: 4847

Network Equipment & Licenses

Note: For more configuration options, please refer to the TN9400 configuration table on page 6.1-4.

ITEM CODE	DESCRIPTION
Hardware RFSS - AC	
T01-00023-AAAA	TND P25 RFSS Controller HA AC Standard
T01-00023-BAAA	TND P25 RFSS Controller SA AC Standard
Hardware RFSS - DC	
T01-00023-BBAA	TND P25 RFSS Controller SA 48V DC Standard
T01-00023-ABAA	TND P25 RFSS Controller HA 48V DC Standard
Hardware Site Controller - AC	
T01-00024-AAAA	TND P25 Site Controller HA AC Standard
T01-00024-BAAA	TND P25 Site Controller SA AC Standard
Hardware Site Controller - DC	
T01-00024-ABAA	TND P25 Site Controller HA 48V DC Standard
T01-00024-BBAA	TND P25 Site Controller SA 48V DC Standard
TN9400110100000000	TND P25 Access RFSS and Site Controller
Software Licenses	
TNAS500	License TaitNet P25 - RFSS Controller
TNAS501	License TaitNet P25 - RFSS Controller High Availability
TNAS502	License TaitNet P25 - Enable IP
TNAS505	License TaitNet P25 - CSSI Console System
TNAS506	License TaitNet P25 - CSSI Voice Recorder
TNAS507	License TaitNet P25 - ISSI Intra System
TNAS509	License TaitNet P25 - Trunked Analog Gateway
TNAS510	License TaitNet P25 - Site Controller Phase 1
TNAS511	License TaitNet P25 - Simulcast Site Controller Phase 1
TNAS512	License TaitNet P25 - Site Controller High Availability
TNAS515	License TaitNet P25 - Trunked PSTN Gateway Service
TNAS516	License TaitNet P25 - System Transceiver Resource (TEMA & TAM only)
TNAS517	License TaitNet P25 - Receiver Only Resource
TNAS521	License TaitNet P25 - Access RFSS Site Controller and High Availability

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.



TaitNet Network Licences

P25 (TN9400)

Item Code (RFSS Node Controller)	Description	Rules of Engagement
TNAS500 - RFSS Controller	The RFSS controller software runs on a rack-mounted server. It is the central controller for the whole TN9400 trunked network. Using the database, it checks whether an SU is permitted to register on the network. When an SU makes a call request, it checks whether the SU is authorized to make the call and determines where the destination SU(s) are located before setting up the call and switching voice packets to their destination(s).	One TNAS500 required per RFSS Service in the system
TNAS501 - RFSS Controller High Availability	TN9400 P25 trunked networks with Tait controllers enhance their availability by having controllers that consist of a cluster of two servers. If one server fails, the other takes over. Server clusters are highly recommended for the RFSS controller.	One TNAS501 required per HA Cluster in the system configured in a high availability configuration. Can not be purchased independently of TNAS500, though can be purchased later when an existing system (already with TNAS500) adds a high availability option.
TNAS502 - EnableIP	A TNAS502 licence enables IP data to pass across a Trunked P25 network. This licence supports functionality within EnableProtect, EnableFleet and AVL systems	One TNAS500 or TNAS501 licence is required. One per P25 System*.
TNAS505 - CSSI Console System	The CSSI interface is for connecting to dispatch equipment and a PSTN gateway for connecting to a PBX and/or to the PSTN.	One TNAS505 CSSI connection required per console sub system. Note that a console sub-system may handle multiple dispatch seats.
TNAS506 - ISSI Voice Recorder	The ISSI interface is for connecting to Voice Recorder equipment.	One TNAS506 ISSI connection required per Voice recorder sub system. Note that a voice recorder sub-system may handle multiple talkpaths.
TNAS507 - ISSI Intra System	An RFSS must have the feature license TNAS507 to enable the ISSI interface between RFSSs with the same WACN ID and system ID. This enables a connection to another RFSS to extend the size of the network.	One TNAS507 licence required per RFSS requiring interconnection to another RFSS via the ISSI protocol. This licence enables the capability for ISSI to work between RFSS's. There is no need to have multiple ISSI licenses when connecting multiple RFSS's together. (eg one RFSS needing 4 x TNAS507 licenses)
TNAS509 - Trunked Analog Gateway	An RFSS must have the feature license TNAS509 to enable each TAG that access the TN9400 trunked network.	One TNAS509 licence required per TAG.
TNAS515 - Trunked PSTN Gateway Service	A TNAS515 licence is required to enable a CSSI interface to a PSTN gateway for connecting a PBX and/or a PSTN telephone network.	One TNAS515 required per PSTN G/W Server. Currently only 1 PSTN line available via the Cisco FXO card. (Note - this is not licensed per PSTN line)
TNAS516 - System Transceiver Resource (TAM & TEMA only)	A TNAS516 licence is required for each reciter attached to the network. (TAM & TEMA only)	One TNAS516 licence required per reciter in the system that forms part of a physical RF channel
TNAS521 - Access	The P25 Access Phase 1 allows both the RFSS and the Site controller applications to run on one rack-mounted server and High Availability.	One TNAS521 licence required per P25 Access Phase 1 single Site system. In a simulcast system a logical single Site is composed of multiple physical Sites.
TNAS523 - RFSS OTAP	An RFSS must have the feature license TNAS523 to enable OTAP across the TN9400 Trunked network.	One TNAS523 RFSS OTAP licence required.

* A P25 system is defined as a trunked site linked to one RFSS or RFSS H/A Cluster

Item Code (Site Controller)	Description	Rules of Engagement
TNAS510 - Site Controller Phase 1	Each Non-simulcast site in the TN9400 P25 trunked network needs a TNAS510 site controller phase 1 licence. Like the RFSS controller, it consists of a rack-mounted server running Tait site controller software. The site controller monitors each of the channels at the site, processes SU control signalling (such as location registrations and call requests), and allocates channels to calls. It provides a constant stream of signalling to the control channel for broadcasting to SUs in its coverage area, providing them with information about current calls, system status and adjacent sites.	One TNAS510 licence required per site controller server.
TNAS511 - Simulcast Site Controller Phase 1	An Phase 1 Simulcast licence (simultaneous broadcasting) with FDMA support is the simultaneous transmitting by multiple base station/repeaters of the same signal on the same frequency. This makes it possible to extend the coverage of a single frequency pair to a very wide area.	One TNAS511 licence required per Phase 1 site controller to extend the coverage of a site. Per default this licence enables Phase 1 C4FM simulcast or LSM simulcast.
TNAS512 - Site Controller High Availability	High Availability is a mode of operation where two servers are available to perform the function of a single logical server. If one of the server's hardware and/or software fails, the other server takes over the role and function of the failed server.	One TNAS512 licence required per site controller server requiring High Availability. Can not be purchased independent of either a TNAS510 or TNAS511 licence unless being purchased as an enhancement to an existing TN9400 system.
TNAS513 - Site Controller Phase 2 Support	This licence enables the site controller to operate in P25 Phase 2 mode.	One TNAS510 licence is required as a prerequisite.
TNAS514 - Simulcast Site Controller Phase 2 Support	An Phase 2 Simulcast licence (simultaneous broadcasting) with TDMA support is the simultaneous transmitting by multiple base station/repeaters of the same signal on the same frequency. This makes it possible to extend the coverage of a single frequency pair to a very wide area.	One TNAS514 licence required per Phase 2 site controller to extend the coverage of a site. This licence enables the specific DQPSK Phase 2 simulcast, when operating in Phase 2 mode.

TN9400

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

P25 Digital Network Infrastructure - TN9400

TN9400 - P25 Access System

Preferred choice for designs involving one (1) functional site (i.e. one simulcast or a single site).

E/C	Item Code	Description	List Price
S	TN9400110100000000	Server, TN9400, P25 RFSS + SC, Mid-Level, AC	\$ 6,039.00
S	TN9400400100000000	Server, TN9400, P25 PSTN, High Level, AC	\$ 17,839.00
S	TN9400400200000000	Server, TN9400, P25 PSTN, High Level, DC	\$ 17,839.00

TN9400 - P25 Express6 System

Preferred choice for designs involving up to six (6) functional sites. A single simulcast cell is considered one functional site.

E/C	Item Code	Description	List Price
S	TN9400110100000000	Server, TN9400, P25 RFSS + SC, Mid-Level, AC	\$ 6,039.00
S	TN9400010000000000	Server, TN9400, P25 RFSS+SC, High Level, AC	\$ 22,289.00
S	TN9400020000000000	Server, TN9400, P25 RFSS+SC, High Level, DC	\$ 22,289.00
S	TN9400300100000000	Server, TN9400, P25 SC, High Level, AC	\$ 17,839.00
S	TN9400300200000000	Server, TN9400, P25 SC, High Level, DC	\$ 17,839.00
S	TN9400310100000000	Server, TN9400, P25 SC, Mid-Level, AC	\$ 6,039.00
S	TN9400400100000000	Server, TN9400, P25 PSTN, High Level, AC	\$ 17,839.00
S	TN9400400200000000	Server, TN9400, P25 PSTN, High Level, DC	\$ 17,839.00

TN9400 - P25 Full System

Preferred choice for designs involving up to six (6) functional sites. A single simulcast cell is considered one functional site.

E/C	Item Code	Description	List Price
S	TN9400200100000000	Server, TN9400, P25 RFSS, High Level, AC	\$ 22,289.00
S	TN9400200200000000	Server, TN9400, P25 RFSS, High Level, DC	\$ 22,289.00
S	TN9400300100000000	Server, TN9400, P25 SC, High Level, AC	\$ 17,839.00
S	TN9400300200000000	Server, TN9400, P25 SC, High Level, DC	\$ 17,839.00
S	TN9400400100000000	Server, TN9400, P25 PSTN, High Level, AC	\$ 17,839.00
S	TN9400400200000000	Server, TN9400, P25 PSTN, High Level, DC	\$ 17,839.00

P25 Digital Network Infrastructure - Software Feature Options

TN9400 - Software Licenses

E/C	Item Code	Description	List Price
S	TNAS500	License, P25T, RFSS Controller	\$ 35,900.00
S	TNAS501	License, P25T, RFSS Controller HA	\$ 17,950.00
S	TNAS502	License, P25T, RFSS Enable IP and OTAP	\$ 829.00
S	TNAS505	License, P25T, CSSI Console System	\$ 9,598.00
S	TNAS506	License, P25T, CSS Voice Recorder	\$ 2,857.00
S	TNAS507	License, P25T, ISSI Intra System	\$ 12,631.00
S	TNAS509	License, P25T, Trunked Analog Gtway	\$ 2,857.00
S	TNAS510	License, P25T, Site Controller Phase 1	\$ 16,911.00
S	TNAS512	License, P25T, Site Controller HA	\$ 5,983.00
S	TNAS513	License, P25T, Site Controller Phase 2	\$ 8,456.00
S	TNAS515	License, P25T, Trunked PSTN Gtway	\$ 11,426.00
S	TNAS516	License, P25T, System Transceiver Resrc	\$ 2,742.00
S	TNAS521	License, P25T, Access RFSS + SC HA	\$ 31,113.00
S	TNAS524	License, P25T, Express6 RFSS + SC HA	\$ 40,447.00
S	TNAS525	License, P25T, Express6, SC HA	\$ 14,881.00

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TN9100 P25 Gateway Network Infrastructure



Step One (1 of 5) – Select a gateway chassis			
E/C	Model Number	Description	List Price
Option 1 – Gateway Multi-Channel with PMU option Chassis (Maximum x5 Channels)			
S	TBA2645	Subrack Multi Rctr Max 5 Chls	\$1,399.00
Option 1 – Gateway Multi-Channel without PMU option Chassis (Maximum x7 Channels)			
S	TBA2647	Subrack Multi Rctr Max 7 Chls	\$1,399.00

Step Two (2 of 5) – Select Console Gateway or Trunked Analog Gateway Options

E/C	Model Number	Description	List Price
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Console Gateway Options

S	TBA50H2-PAC1	P25 Console Gateway Reciter DES	\$4,508.00
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A maximum of x5 Gateways Channel can be selected with the PMU chassis option and x7 maximum for no PMU chassis option.
Please repeat this option/step for each Gateway hardware as required.

Trunked Analog Gateway Option

S	TBA50H2-PBC1	P25 Trunked Analog Gateway Reciter DES	\$4,721.00
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A maximum of x5 Gateways Channel can be selected with the PMU chassis option and x7 maximum for no PMU chassis option.
Please repeat this option/step for each Gateway hardware as required.

Step Three (3 of 5) – Select Power Management Unit option based on power input			
E/C	Model Number	Description	List Price
DC Options – PMU 12VDC			
S	TBA3001-1100	PMU, TB9000, 12VDC Aux12V	\$1,889.00
S	TBA3001-1200	PMU, TB9000, 12VDC Aux24V	\$1,889.00
S	TBA3001-1400	PMU, TB9000, 12VDC Aux48V	\$1,889.00
DC Options – PMU 24VDC			
S	TBA3002-2100	PMU, TB9000, 24VDC Aux12V	\$1,889.00
S	TBA3002-2200	PMU, TB9000, 24VDC Aux24V	\$1,889.00
S	TBA3002-2400	PMU, TB9000, 24VDC Aux48V	\$1,889.00
DC Options – PMU 48VDC			
S	TBA3004-4100	PMU, TB9000, 48VDC Aux12V	\$1,889.00
S	TBA3004-4200	PMU, TB9000, 48VDC Aux24V	\$1,889.00
S	TBA3004-4400	PMU, TB9000, 48VDC Aux48V	\$1,889.00
AC Options – PMU			
S	TBA30A0-0100	PMU, TB9000, AC Aux12	\$1,889.00
S	TBA30A0-0200	PMU, TB9000, AC Aux24	\$1,889.00
S	TBA30A0-0400	PMU, TB9000, AC Aux48	\$1,889.00
Mains Power Cable			
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00
AC/DC Options – PMU 12VDC			
S	TBA30A1-1100	PMU, TB9000, 12VACDC Aux12V	\$2,501.00
S	TBA30A1-1200	PMU, TB9000, 12VACDC Aux24V	\$2,501.00
S	TBA30A1-1400	PMU, TB9000, 12VACDC Aux48V	\$2,501.00
AC/DC Options – PMU 24VDC			
S	TBA30A2-2100	PMU, TB9000, 24VACDC Aux12V	\$2,501.00
S	TBA30A2-2200	PMU, TB9000, 24VACDC Aux24V	\$2,501.00
S	TBA30A2-2400	PMU, TB9000, 24VACDC Aux48V	\$2,501.00

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E/C	Model Number	Description	List Price
AC/DC Options – PMU 48VDC			
S	TBA30A4-4100	PMU, TB9000, 48VACDC Aux12V	\$2,501.00
S	TBA30A4-4200	PMU, TB9000, 48VACDC Aux24V	\$2,501.00
S	TBA30A4-4400	PMU, TB9000, 48VACDC Aux48V	\$2,501.00
Mains Power Cable			
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

Step four (4 of 5) – Select Software Feature Enablers based on the configuration needed			
E/C	Model Number	Description	List Price

Option 1 – Console Gateway Enablers			
S	TBAS054	SFE - MDC1200 Signalling on Analog Line	\$262.00
S	TBAS058	SFE - AES Encryption	\$1,047.00
S	TBAS060	SFE - Digital Fixed Station Interface	\$523.00

A maximum of x5 (PMU option) or x7 (without PMU option) Software Feature Enablers can be requested per Gateway configuration. Please repeat this option/step for each Gateway hardware as required.

Option 2 – Trunked Analog Gateway Enablers			
S	TBAS054	SFE - MDC1200 Signalling on Analog Line	\$262.00
S	TBAS058	SFE - AES Encryption	\$1,047.00

A maximum of x5 (PMU option) or x7 (without PMU option) Software Feature Enablers can be requested per Gateway configuration. Please repeat this option/step for each Gateway hardware as required.

TN9100

Step four (5 of 5) – Select any additional standalone accessories desired			
E/C	Model Number	Description	List Price
S	TBAA03-13	Auxiliary Support Bracket, TB8/9	\$35.00
S	TBAA03-16	Carrying Handles, TB8/9	\$43.00

TP9500

TP9500 DMR Portable Radio



The TP9500 portables offer trunked DMR operation (DMR Tier 3) as well as conventional DMR operation (DMR Tier 2), full MPT 1327, and conventional FM functionality in one device. Designed for ease of use, this DMR portable features intuitive controls and a color screen for enhanced usability. Active noise cancellation and suppression technologies reduce background sounds while enhancing voice transmissions, ensuring users have loud and clear audio.

Each radio comes with the following features as standard:

- MPT Trunking
- GPS Hardware/Location Services
- Bluetooth®
- Voice Annunciations
- Enhanced Location Reporting
- DMR Conventional
- ARC4 Encryption
- Alphanumeric ID
- DMR OTAP capability*
- WiFi® OTAP capability*

*Requires EnableFleet

Step One (1 of 4) – Select one (1) radio body based on the frequency band and keypad type. Then, select an antenna.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – SCAN (4-Key)			
S	TP9555B1BC-H	Portable, TP9500, 136-174M, Scn, Blk	\$983.00
VHF (136-174 MHz) – SYSTEM (16-Key)			
S	TP9560B1BC-H	Portable, TP9500, 136-174M, Sys, Blk	\$1,055.00

TP9500

E/C	Model Number	Description	List Price
VHF Antenna Options			
S	TPA-AN-001	Antenna, 136-225MHz, Hel Tun	\$22.00
S	TPA-AN-002	Antenna, 136-151MHz, Hel	\$22.00
S	TPA-AN-003	Antenna, 150-162MHz, Hel	\$22.00
S	TPA-AN-004	Antenna, 162-174MHz, Hel	\$22.00
S	TPA-AN-034	Antenna, 136-174MHz, Hel	\$30.00
UHF-L (378 – 470 MHz) – SCAN (4-Key)			
S	TP9555HKBC-H	Portable, TP9500, 378-470M, Scn, Blk	\$983.00
UHF-L (378 – 470 MHz) – SYSTEM (16-Key)			
S	TP9560HKBC-H	Portable, TP9500, 378-470M, Sys, Blk	\$1,055.00
UHF-L Antenna Options			
S	TPA-AN-037	Antenna, 378-470MHz, 1/4 Wave Whip	\$22.00
S	TPA-AN-038	Antenna, 378-470MHz, Hel	\$22.00
S	TPA-AN-011	Antenna, 400-470MHz, Whip	\$22.00
S	TPA-AN-013	Antenna, 400-470MHz, Hel	\$22.00

TP9500

E/C	Model Number	Description	List Price
UHF-H (450 – 520 MHz) - SCAN (4-Key)			
S	TP9555H7BC-H	Portable, TP9500, 450-520M, Scn, Blk	\$983.00
UHF-H (450 – 520 MHz) - SYSTEM (16-Key)			
S	TP9560H7BC-H	Portable, TP9500, 450-520M, Sys, Blk	\$1,055.00
UHF-H Antenna Options			
S	TPA-AN-012	Antenna, 450-520MHz, Whip	\$22.00
S	TPA-AN-015	Antenna, 450-520MHz, Hel	\$22.00
700/800 MHz (762 – 870 MHz) - SCAN (4-Key)			
S	TP9555K5BC-H	Portable, TP9500, 762-870M, Scn, Blk	\$983.00
700/800 MHz (762 – 870 MHz) - SYSTEM (16-Key)			
S	TP9560K5BC-H	Portable, TP9500, 762-870M, Sys, Blk	\$1,055.00
700/800 Antenna Options			
S	TPA-AN-022	Antenna, 762-870MHz, 1/2 Wave Whip	\$22.00
S	TPA-AN-028	Antenna, 762-870MHz, Hel	\$22.00

TP9500

Step Two (2 of 4) – Select one battery and one charger

E/C	Model Number	Description	List Price
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Battery Options

S	T03-00011-AAAA	Battery, Li-Ion 1880mAh	\$93.00
S	T03-00011-ABAA	Battery, Li-Ion 1880mAh w/ Belt Clip	\$104.00
S	T03-00011-CAAA	Battery, Li-Ion 2400mAh	\$114.00
S	T03-00011-CBAA	Battery, Li-Ion 2400mAh w/ Belt Clip	\$125.00
S	TPA-CA-201	Belt Clip 55mm	\$11.00
S	TPA-CA-207	Belt Loop for D-Clip 75mm	\$20.00
S	TPA-CA-208	Belt Clip Adaptor for 55mm	\$16.00

Charger Options

S	T03-00012-AAFA	Charger Single Fast Li-Ion No plug pack	\$66.00
S	T03-00012-AEFA	Charger, Single Bay, Li-Ion w/ plug pack	\$83.00
S	T03-00013-AEDA	Charger, Multi Bay, Li-Ion w/ cable	\$805.00
S	T03-00013-AADA	Charger Multi Li-Ion No cable	\$765.00
S	009-00017-01	PSU Plug Pack 12V 2A US	\$17.00
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

TP9500

Step Three (3 of 4) – Radio body above comes in standard Analog mode. If desired, select an operating mode and any additional add on software feature options.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TPAS080	SFE - DMR Trunking	\$200.00
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Encryption – Software Features

S	TPAS058-DMR	SFE - DMR AES Encryption	\$200.00
S	TPAS095	SFE – DES Encryption	\$53.00

Data Enablers – Software Features

S	TPAS056-DMR	SFE - User IP Data	\$137.00
S	TPAS107	SFE -Embedded GPS Interface	\$50.00
S	TPAS105-DMR	SFE - Geofencing Services	\$120.00

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

TP9500

Step Four (4 of 4) – Select any additional accessories desired

E/C	Model Number	Description	List Price
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Vehicle Charger Options

S	T03-00014-BAAB	Charger, Vehicle	\$385.00
S	T03-00014-AAAA	Charger, Vehicle, Battery Only, TP9000	\$158.00

Speaker Microphones

S	T03-00045-JFAC	SpkrMic, Evolution, E-Button, 2.5mm	\$186.00
S	T03-00045-KFAC	SpkrMic, Storm, E-Button, 2.5mm, IP68	\$215.00
S	T03-00045-DMAC	SpkrMic, Genesis, E-Button, IP68	\$279.00
S	T03-00045-ERAA	Spkr Mic Light-Weight 3.5mm-Jack	\$63.00
S	T03-00045-FRAA	Spkr Mic Medium-Weight 3.5mm-Jack	\$67.00

Audio Accessories – Headsets

S	T03-00046-FAAB	Headset, Heavy-Duty Overhead	\$607.00
S	T03-00046-FEAB	Headset, Heavy-Duty Behind-Head	\$607.00
S	T03-00046-GEAA	Headset, Hurricane II Behind Head	\$571.00

Audio Accessories – Surveillance Kits

S	T03-00047-AAAA	Kit, 2-Wire Surveillance	\$233.00
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Audio Accessories – Ear Pieces

S	T03-00053-0451	Earphone In-Ear 2.5mm	\$69.00
S	T03-00120-AAAD	Eartube In-Ear 2.5mm	\$20.00
S	T03-00120-BAAD	Earhook 2.5mm	\$12.00
S	T03-00120-FAAD	Eartube Earhook 2.5mm	\$20.00
S	T03-00120-GAAD	Earhook Transparent Hi-Vol 2.5mm	\$12.00
S	T03-00120-HAAD	Earphone Transparent D-Ring Hi-Vol 2.5mm	\$12.00
S	T952-055	Erhanger 2.5mm	\$39.00

TP9500

E/C	Model Number	Description	List Price
Carrying Case - Leather			
S	T03-00079-0001	Case Hvy Duty Lther DStud BLoop TP95/96	\$73.00
S	T03-00079-0002	Case Hvy Duty Leathr Spring Clip TP95/96	\$63.00
S	T03-00079-0005	Case Soft Leather Use Batt Clip TP95/96	\$39.00
S	T03-00079-0007	Case Hvy Duty Leathr BLoop Dring TP95/96	\$56.00
Carrying Case – Nylon			
S	T03-00079-0003	Case Nylon D-Stud B/Loop TP95/96	\$59.00
S	T03-00079-0004	Case Nylon Use Battery Clip TP95/96	\$42.00
S	T03-00079-0006	Case Nylon D-Stud Chest Harness TP95/96	\$100.00
Carrying Case Accessories			
S	T03-00038-0022	Belt Loop for D-Stud 55mm	\$20.00
S	T03-00038-0023	Spring Clip for D-Stud 40mm	\$20.00
S	T03-00038-0030	Battery Spacer Case Heavy Duty Leather	\$2.00
S	T03-00038-0034	Shoulder Strap Case Heavy Duty Leather	\$36.00
Programming and Servicing Kits			
S	T02-00031-0001	TM / TP Programming & Calibration Kit	\$450.00
S	T03-00118-0601	USB to RJ11 Programming Cable	\$137.00
S	T03-00118-0101	TP81/93/94 Programming Adaptor	\$45.00
S	TPA-SV-006	Radio Programming Lead Serial PC to RJ12	\$69.00
S	T03-00011-FAAA	TP81/93/94 DC Service Adaptor	\$103.00
S	T03-00040-0001	TP81/TP93/TP94 Service Kit	\$725.00
S	T03-00118-5301	Assembly Tool Kit	\$292.00
S	TOPA-SV-024	Terminals Calibration Box	\$235.00
S	T02-00031-0002	P25 Programming & Calibration Kit	\$450.00
S	T03-00118-0201	Calibration Adaptor	\$44.00
S	T03-00118-0202	Calibration Low Pass Filter	\$38.00

TP9500

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TP9300

TP9300 DMR Portable Radio



L3Harris DMR is a highly reliable, modern, digital radio solution that is designed for mission critical environments. The TP9300 portables offer trunked DMR operation (DMR Tier 3) as well as conventional DMR operation (DMR Tier 2), full MPT 1327, and conventional FM functionality in one device. It can roam between DMR and MPT networks.

Each radio comes with the following features as standard:

- MPT Trunking
- GPS Hardware/Location Services
- Bluetooth®
- Voice Annunciations
- Enhanced Location Reporting
- DMR Conventional
- ARC4 Encryption

Step One (1 of 4) – Select one (1) radio body based on the frequency band, keypad type, and color. Then select an antenna.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – NO KEY NO DISPLAY			
S	TP9300B1BA	Portable, TP9300, 136-174M, NKND, Blk	\$635.00
S	TP9300B1CA	Portable, TP9300, 136-174M, NKND, Red	\$685.00
S	TP9300B1DA	Portable, TP9300, 136-174M, NKND, Yel	\$685.00
S	TP9300B1EA	Portable, TP9300, 136-174M, NKND, Org	\$685.00
S	TP9300B1FA	Portable, TP9300, 136-174M, NKND, Grn	\$685.00

TP9300

E/C	Model Number	Description	List Price
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VHF (136-174 MHz) – SCAN (4-Key)			
S	TP9305B1BA	Portable, TP9300, 136-174M, Scn, Blk	\$783.00
S	TP9305B1CA	Portable, TP9300, 136-174M, Scn, Red	\$833.00
S	TP9305B1DA	Portable, TP9300, 136-174M, Scn, Yel	\$833.00
S	TP9305B1EA	Portable, TP9300, 136-174M, Scn, Org	\$833.00
S	TP9305B1FA	Portable, TP9300, 136-174M, Scn, Grn	\$833.00

VHF (136-174 MHz) – SYSTEM (16-Key)			
S	TP9306B1BA	Portable, TP9300, 136-174M, Sys, Blk	\$855.00
S	TP9306B1CA	Portable, TP9300, 136-174M, Sys, Red	\$905.00
S	TP9306B1DA	Portable, TP9300, 136-174M, Sys, Yel	\$905.00
S	TP9306B1EA	Portable, TP9300, 136-174M, Sys, Org	\$905.00
S	TP9306B1FA	Portable, TP9300, 136-174M, Sys, Grn	\$905.00

VHF Antenna Options			
S	TPA-AN-001	Antenna, 136-225MHz, Hel Tun	\$22.00
S	TPA-AN-002	Antenna, 136-151MHz, Hel	\$22.00
S	TPA-AN-003	Antenna, 150-162MHz, Hel	\$22.00
S	TPA-AN-004	Antenna, 162-174MHz, Hel	\$22.00
S	TPA-AN-034	Antenna, 136-174MHz, Hel	\$30.00

220 MHz (174-225 MHz) – NO KEY NO DISPLAY			
S	TP9300C0BA	Portable, TP9300, 174-225M, NKND, Blk	\$635.00
S	TP9300C0CA	Portable, TP9300, 174-225M, NKND, Red	\$685.00
S	TP9300C0DA	Portable, TP9300, 174-225M, NKND, Yel	\$685.00
S	TP9300C0EA	Portable, TP9300, 174-225M, NKND, Org	\$685.00
S	TP9300C0FA	Portable, TP9300, 174-225M, NKND, Grn	\$685.00

220 MHz (174-225 MHz) – SCAN (4-Key)			
S	TP9305C0BA	Portable, TP9300, 174-225M, Scn, Blk	\$783.00
S	TP9305C0CA	Portable, TP9300, 174-225M, Scn, Red	\$833.00
S	TP9305C0DA	Portable, TP9300, 174-225M, Scn, Yel	\$833.00
S	TP9305C0EA	Portable, TP9300, 174-225M, Scn, Org	\$833.00
S	TP9305C0FA	Portable, TP9300, 174-225M, Scn, Grn	\$833.00

TP9300

E/C	Model Number	Description	List Price
220 MHz (174-225 MHz) – SYSTEM (16-Key)			
S	TP9306C0BA	Portable, TP9300, 174-225M, Sys, Blk	\$855.00
S	TP9306C0CA	Portable, TP9300, 174-225M, Sys, Red	\$905.00
S	TP9306C0DA	Portable, TP9300, 174-225M, Sys, Yel	\$905.00
S	TP9306C0EA	Portable, TP9300, 174-225M, Sys, Org	\$905.00
S	TP9306C0FA	Portable, TP9300, 174-225M, Sys, Grn	\$905.00
220 MHz Antenna Options			
S	TPA-AN-040	Antenna, 174-193MHz, Hel	\$22.00
S	TPA-AN-041	Antenna, 213-225MHz, Hel	\$22.00
UHF-L (378 – 470 MHz) – NO KEY NO DISPLAY			
S	TP9300HKBA	Portable, TP9300, 378-470M, NKND, Blk	\$635.00
S	TP9300HKCA	Portable, TP9300, 378-470M, NKND, Red	\$685.00
S	TP9300HKDA	Portable, TP9300, 378-470M, NKND, Yel	\$685.00
S	TP9300HKEA	Portable, TP9300, 378-470M, NKND, Org	\$685.00
S	TP9300HKFA	Portable, TP9300, 38-470M, NKND, Grn	\$685.00
UHF-L (378 – 470 MHz) – SCAN (4-Key)			
S	TP9305HKBA	Portable, TP9300, 378-470M, Scn, Blk	\$783.00
S	TP9305HKCA	Portable, TP9300, 378-470M, Scn, Red	\$833.00
S	TP9305HKDA	Portable, TP9300, 378-470M, Scn, Yel	\$833.00
S	TP9305HKEA	Portable, TP9300, 378-470M, Scn, Org	\$833.00
S	TP9305HKFA	Portable, TP9300, 378-470M, Scn, Grn	\$833.00
UHF-L (378 – 470 MHz) – SYSTEM (16-Key)			
S	TP9306HKBA	Portable, TP9300, 378-470M, Sys, Blk	\$855.00
S	TP9306HKCA	Portable, TP9300, 378-470M, Sys, Red	\$905.00
S	TP9306HKDA	Portable, TP9300, 378-470M, Sys, Yel	\$905.00
S	TP9306HKEA	Portable, TP9300, 378-470M, Sys, Org	\$905.00
S	TP9306HKFA	Portable, TP9300, 378-470M, Sys, Grn	\$905.00
UHF-L Antenna Options			
S	TPA-AN-037	Antenna, 378-470MHz, 1/4 Wave Whip	\$22.00
S	TPA-AN-038	Antenna, 378-470MHz, Hel	\$22.00
S	TPA-AN-011	Antenna, 400-470MHz, Whip	\$22.00
S	TPA-AN-013	Antenna, 400-470MHz, Hel	\$22.00

TP9300

E/C	Model Number	Description	List Price
UHF-H (450 – 520 MHz) – NO KEY NO DISPLAY			
S	TP9300H7BA	Portable, TP9300, 450-520M, NKND, Blk	\$635.00
S	TP9300H7CA	Portable, TP9300, 450-520M, NKND, Red	\$685.00
S	TP9300H7DA	Portable, TP9300, 450-520M, NKND, Yel	\$685.00
S	TP9300H7EA	Portable, TP9300, 450-520M, NKND, Org	\$685.00
S	TP9300H7FA	Portable, TP9300, 450-520M, NKND, Grn	\$685.00
UHF-H (450 – 520 MHz) - SCAN (4-Key)			
S	TP9305H7BA	Portable, TP9300, 450-520M, Scn, Blk	\$783.00
S	TP9305H7CA	Portable, TP9300, 450-520M, Scn, Red	\$833.00
S	TP9305H7DA	Portable, TP9300, 450-520M, Scn, Yel	\$833.00
S	TP9305H7EA	Portable, TP9300, 450-520M, Scn, Org	\$833.00
S	TP9305H7FA	Portable, TP9300, 450-520M, Scn, Grn	\$833.00
UHF-H (450 – 520 MHz) – SYSTEM (16-Key)			
S	TP9306H7BA	Portable, TP9300, 450-520M, Sys, Blk	\$855.00
S	TP9306H7CA	Portable, TP9300, 450-520M, Sys, Red	\$905.00
S	TP9306H7DA	Portable, TP9300, 450-520M, Sys, Yel	\$905.00
S	TP9306H7EA	Portable, TP9300, 450-520M, Sys, Org	\$905.00
S	TP9306H7FA	Portable, TP9300, 450-520M, Sys, Grn	\$905.00
UHF-H Antenna Options			
S	TPA-AN-012	Antenna, 450-520MHz, Whip	\$22.00
S	TPA-AN-015	Antenna, 450-520MHz, Hel	\$22.00

TP9300

E/C	Model Number	Description	List Price
700/800 MHz (762 – 870 MHz) – NO KEY NO DISPLAY			
S	TP9300K5BA	Portable, TP9300, 762-870M, NKND, Blk	\$635.00
S	TP9300K5CA	Portable, TP9300, 762-870M, NKND, Red	\$685.00
S	TP9300K5DA	Portable, TP9300, 762-870M, NKND, Yel	\$685.00
S	TP9300K5EA	Portable, TP9300, 762-870M, NKND, Org	\$685.00
S	TP9300K5FA	Portable, TP9300, 762-870M, NKND, Grn	\$685.00
700/800 MHz (762 – 870 MHz) - SCAN (4-Key)			
S	TP9305K5BA	Portable, TP9300, 762-870M, Scn, Blk	\$783.00
S	TP9305K5CA	Portable, TP9300, 762-870M, Scn, Red	\$833.00
S	TP9305K5DA	Portable, TP9300, 762-870M, Scn, Yel	\$833.00
S	TP9305K5EA	Portable, TP9300, 762-870M, Scn, Org	\$833.00
S	TP9305K5FA	Portable, TP9300, 762-870M, Scn, Grn	\$833.00
700/800 MHz (762 – 870 MHz) - SYSTEM (16-Key)			
S	TP9306K5BA	Portable, TP9300, 762-870M, Sys, Blk	\$855.00
S	TP9306K5CA	Portable, TP9300, 762-870M, Sys, Red	\$905.00
S	TP9306K5DA	Portable, TP9300, 762-870M, Sys, Yel	\$905.00
S	TP9306K5EA	Portable, TP9300, 762-870M, Sys, Org	\$905.00
S	TP9306K5FA	Portable, TP9300, 762-870M, Sys, Grn	\$905.00
700/800 Antenna Options			
S	TPA-AN-022	Antenna, 762-870MHz, 1/2 Wave Whip	\$22.00
S	TPA-AN-028	Antenna, 762-870MHz, Hel	\$22.00

TP9300

E/C	Model Number	Description	List Price
900 MHz (896 – 941 MHz) - SYSTEM (16-Key)			
S	TP9306L3BA	Portable, TP9300, 896-941M, Sys, Blk	\$855.00
900 MHz Antenna Options			
S	TPA-AN-025	Antenna, 896-941MHz, 1/2 Wave Whip TP8/TP9	\$22.00

TP9300

Step Two (2 of 4) – Select one battery and one charger

E/C	Model Number	Description	List Price
Battery Options			
S	T03-00011-AAAA	Battery, Li-Ion 1880mAh	\$93.00
S	T03-00011-ABAA	Battery, Li-Ion 1880mAh w/ Belt Clip	\$104.00
S	T03-00011-CAAA	Battery, Li-Ion 2400mAh	\$114.00
S	T03-00011-CBAA	Battery, Li-Ion 2400mAh w/ Belt Clip	\$125.00
S	TPA-CA-201	Belt Clip 55mm	\$11.00
S	TPA-CA-207	Belt Loop for D-Clip 75mm	\$20.00
S	TPA-CA-208	Belt Clip Adaptor for 55mm	\$16.00

Charger Options			
S	T03-00012-AAFA	Charger Single Fast Li-Ion No plug pack	\$66.00
S	T03-00012-AEFA	Charger, Single Bay, Li-Ion w/ plug pack	\$83.00
S	T03-00013-AEDA	Charger, Multi Bay, Li-Ion w/ cable	\$805.00
S	T03-00013-AADA	Charger Multi Li-Ion No cable	\$765.00
S	009-00017-01	PSU Plug Pack 12V 2A US	\$17.00
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

TP9300

Step Three (3 of 4) – Radio body above comes in standard Analog mode. If desired, select an operating mode and any additional add on software feature options. Please refer to the notes in red to determine if there is a prerequisite for any of the software features below.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TPAS080	SFE - DMR Trunking	\$200.00
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Encryption – Software Features

S	TPAS095	SFE - Multi Key DES Encryption (Not available for no key no display radio bodies)	\$53.00
S	TPAS058-DMR	SFE - DMR AES Encryption	\$200.00

Data Enablers – Software Features

S	TPAS056-DMR	SFE - User IP Data	\$137.00
S	TPAS105-DMR	SFE - Geofencing Services	\$120.00
S	TPAS075-DMR	SFE - DMR OTAP	\$50.00

System Administration Enablers – Software Features

S	TPAS060	SFE - Tait Radio API	\$136.00
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Radio Enhancement Enablers – Software Features

S	TPAS072	SFE Key - Alphanumeric ID (TPAS080 Prerequisite) (Not available for no key no display radio bodies)	\$0.01
S	TPAS083	SFE - 20/25kHz Wideband Enable (Not available to US FCC-regulated customers)	\$0.01

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

TP9300

Step Four (4 of 4) – Select any additional accessories desired

E/C	Model Number	Description	List Price
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Vehicle Charger Options

S	T03-00014-BAAB	Charger, Vehicle	\$385.00
S	T03-00014-AAAA	Charger, Vehicle, Battery Only	\$158.00

Speaker Microphones

S	T03-00045-JFAC	SpkrMic, Evolution, E-Button, 2.5mm	\$186.00
S	T03-00045-KFAC	SpkrMic, Storm, E-Button, 2.5mm, IP68	\$215.00
S	T03-00045-DMAC	SpkrMic, Genesis, E-Button, IP68	\$279.00
S	T03-00045-ERAA	Spkr Mic Light-Weight 3.5mm-Jack	\$63.00
S	T03-00045-FRAA	Spkr Mic Medium-Weight 3.5mm-Jack	\$67.00

Audio Accessories - Headsets

S	T03-00046-FAAB	Headset, Heavy-Duty Overhead	\$607.00
S	T03-00046-FEAB	Headset, Heavy-Duty Behind-Head	\$607.00
S	T03-00046-GEAA	Headset, Hurricane II Behind Head	\$571.00
S	T03-00046-EFAA	Headset L-Wt Behind-Hd Boom-Mic Fngr-PTT	\$76.00

Audio Accessories – Surveillance Kits

S	T03-00047-AAAA	Kit, 2-Wire Surveillance	\$233.00
S	T03-00053-0101	Ring PTT, Wired Light Duty (BT Use)	\$75.00

Audio Accessories – Ear Pieces

S	T03-00053-0451	Earphone In-Ear 2.5mm	\$69.00
S	T03-00120-AAAD	Eartube In-Ear 2.5mm	\$20.00
S	T03-00120-BAAD	Earhook 2.5mm	\$12.00
S	T03-00120-FAAD	Eartube Earhook 2.5mm	\$20.00
S	T03-00120-GAAD	Earhook Transparent Hi-Vol 2.5mm	\$12.00
S	T03-00120-HAAD	Earphone Transparent D-Ring Hi-Vol 2.5mm	\$12.00
S	T952-055	Erhanger 2.5mm	\$39.00

Carrying Case - Leather

S	T03-00038-0001	Case Hvy Duty Leather NoKey DStud B/Loop	\$66.00
S	T03-00038-0002	Case Hvy Duty Leather NoKey Spring Clip	\$57.00
S	T03-00038-0003	Case Hvy Duty Leather NoKey B/Loop	\$51.00
S	T03-00038-0004	Case Hvy Duty Leather 4Key DStud B/Loop	\$66.00
S	T03-00038-0005	Case Hvy Duty Leather 4Key Spring Clip	\$57.00
S	T03-00038-0006	Case Hvy Duty Leather 4Key B/Loop	\$51.00
S	T03-00038-0007	Case Hvy Duty Leather 16Key DStud B/Loop	\$66.00
S	T03-00038-0008	Case Hvy Duty Leather 16Key Spring Clip	\$57.00

E/C	Model Number	Description	List Price
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Carrying Case – Leather (Cont'd)

S	T03-00038-0009	Case Hvy Duty Leather 16Key B/Loop	\$51.00
S	T03-00038-0035	Case Hvy Duty Leather NoKey B/Loop Dring	\$51.00
S	T03-00038-0036	Case Hvy Duty Leather 4Key B/Loop Dring	\$51.00
S	T03-00038-0037	Case Hvy Duty Leather 16Key B/Loop Dring	\$51.00
S	T03-00038-0019	Case Soft Leather NoKey Use Batt Clp	\$35.00
S	T03-00038-0020	Case Soft Leather 4Key Use Batt Clp	\$35.00
S	T03-00038-0021	Case Soft Leather 16Key Use Batt Clp	\$35.00

Carrying Case – Nylon

S	T03-00038-0010	Case Nylon NoKey D-Stud B/Loop	\$54.00
S	T03-00038-0011	Case Nylon NoKey B/Loop	\$38.00
S	T03-00038-0012	Case Nylon NoKey Use Battery Clp	\$38.00
S	T03-00038-0013	Case Nylon 4Key D-Stud B/Loop	\$54.00
S	T03-00038-0014	Case Nylon 4Key B/Loop	\$38.00
S	T03-00038-0015	Case Nylon 4Key Use Battery Clp	\$38.00
S	T03-00038-0016	Case Nylon 16Key D-Stud B/Loop	\$54.00
S	T03-00038-0017	Case Nylon 16Key B/Loop	\$38.00
S	T03-00038-0018	Case Nylon 16Key Use Battery Clp	\$38.00
S	T03-00038-0024	Case Nylon NoKey Use Battery Clp Org	\$38.00
S	T03-00038-0025	Case Nylon 4Key Use Battery Clp Org	\$38.00
S	T03-00038-0026	Case Nylon 16Key Use Battery Clp Org	\$38.00
S	T03-00038-0027	Case Nylon NoKey D-Stud Chest Harness	\$90.00
S	T03-00038-0028	Case Nylon 4Key D-Stud Chest Harness	\$90.00
S	T03-00038-0029	Case Nylon 16Key D-Stud Chest Harness	\$90.00
S	T03-00038-0031	Case Poly NoKey Use Battery Clp Grn	\$38.00
S	T03-00038-0032	Case Poly 4Key Use Battery Clp Grn	\$38.00
S	T03-00038-0033	Case Poly 16Key Use Battery Clp Grn	\$38.00

Carrying Case Accessories

S	T03-00038-0022	Belt Loop for D-Stud 55mm	\$20.00
S	T03-00038-0023	Spring Clip for D-Stud 40mm	\$20.00
S	T03-00038-0030	Battery Spacer Case Heavy Duty Leather	\$2.00
S	T03-00038-0034	Shoulder Strap Case Heavy Duty Leather	\$36.00

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E/C	Model Number	Description	List Price
Programming Kits			
S	T02-00031-0001	TM / TP Programming & Calibration Kit	\$450.00
S	T03-00118-0601	USB to RJ11 Programming Cable	\$137.00
S	T03-00118-0101	TP81/93/94 Programming Adaptor	\$45.00
S	TPA-SV-006	Radio Programming Lead Serial PC to RJ12	\$69.00
S	T03-00011-FAAA	TP81/93/94 DC Service Adaptor	\$103.00
S	T03-00040-0001	TP81/TP93/TP94 Service Kit	\$725.00
S	T03-00118-5301	Assembly Tool Kit	\$292.00
S	TOPA-SV-024	Terminals Calibration Box	\$235.00
S	T02-00031-0002	P25 Programming & Calibration Kit	\$450.00
S	T03-00118-0201	Calibration Adaptor	\$44.00
S	T03-00118-0202	Calibration Low Pass Filter	\$38.00

TP9300

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TP9300

TP9300 DMR Intrinsically Safe Portable Radio

L3Harris DMR is a highly reliable, modern, digital radio solution that is designed for mission critical environments.

The TP9300 IS portables offer trunked DMR operation as well as full MPT 1327, and conventional FM functionality in one device. It can roam between DMR and MPT networks.

Each radio comes with the following hardware features as standard:

- MPT Trunking
- GPS Hardware/Location Services
- Voice Annunciations
- Enhanced Location Reporting
- DMR Conventional
- ARC4 Encryption



Step One (1 of 4) – Select one (1) radio body based on the frequency band, keypad type, and color. Then select an antenna.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – SYSTEM (16-Key)			
S	TP9361B1GA11	Portable, AEx IIA, TP9300,136-174M, Blue	\$875.00
S	TP9361B1GA21	Portable, AEx IIC, TP9300,136-174M, Blue	\$875.00
VHF Antenna Options			
S	TPA-AN-034	Antenna, 136-174MHz, Hel	\$30.00
UHF (380-470 MHz) – SYSTEM (16-Key)			
S	TP9361HBGA11	Portable, AEx IIA, TP9300,380-470M, Blue	\$875.00
S	TP9361HBGA21	Portable, AEx IIC, TP9300,380-470M, Blue	\$875.00
UHF (380-470 MHz) – Antenna Options			
S	TPA-AN-037	Antenna, 380-470MHz, 1/4 Wave Whip	\$22.00
S	TPA-AN-038	Antenna, 380-470MHz, Hel	\$22.00

TP9300

E/C	Model Number	Description	List Price
700/800 (762-870 MHz) – SYSTEM (16-Key)			
S	TP9361K5GA11	Portable, AEx IIA, TP9300,762-870M, Blue	\$875.00
S	TP9361K5GA21	Portable, AEx IIC, TP9300,762-870M, Blue	\$875.00
700/800 Antenna Options			
S	TPA-AN-022	Antenna, 762-870MHz, 1/2 Wave Whip	\$22.00

TP9300

Step Two (2 of 4) – Select one battery and one charger

E/C	Model Number	Description	List Price
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Battery Options

S	T03-22001-AAAA	Battery, AEx IIA, Li-Ion 2300mAh	\$210.00
S	T03-22001-AACA	Battery, AEx IIC, Li-Ion 2300mAh	\$210.00
S	TPA-CA-201	Belt Clip 55mm	\$11.00

Charger Options

S	T03-22011-BABB	Charger, IS, Single, Li-Ion w/ plug pack	\$207.00
S	T03-22011-CABB	Charger, IS, Multi, Li-Ion w/ cable	\$995.00

TP9300

Step Three (3 of 4) – Radio body above comes in standard Analog mode. If desired, select an operating mode and any additional add on software feature options. Please refer to the notes in red to determine if there is a prerequisite for any of the software features below.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TPAS080	SFE - DMR Trunking	\$200.00
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Encryption – Software Features

S	TPAS095	SFE - DES Encryption (Not available for no key no display radio bodies)	\$53.00
S	TPAS058-DMR	SFE - DMR AES Encryption (TPAS095 Prerequisite)	\$200.00

Data Enablers – Software Features

S	TPAS056-DMR	SFE - User IP Data	\$137.00
S	TPAS105-DMR	SFE - Geofencing Services	\$120.00
S	TPAS075-DMR	SFE - DMR OTAP	\$50.00

System Administration Enablers – Software Features

S	TPAS060	SFE - Tait Radio API	\$136.00
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Radio Enhancement Enablers – Software Features

S	TPAS072	SFE - Alphanumeric ID (TPAS080 Prerequisite) (Not available for no key no display radio bodies)	\$0.01
S	TPAS083	SFE - 20/25kHz Wideband Enable (Not available to US FCC-regulated customers)	\$0.01

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

TP9300

Step Four (4 of 4) – Select any additional accessories desired			
E/C	Model Number	Description	List Price
Vehicle Charger Options			
S	T03-22011-DAAB	Charger, IS, Vehicle	\$430.00
Speaker Microphones			
S	T03-22008-AAAA	SpkrMic, IS, Storm, E-Button, 2.5mm IP68	\$247.00
S	T03-22008-DAAA	Skull Mic, IS	\$1,275.00
Audio Accessories - Headsets			
S	T03-22008-BAAA	Headset, IS, Heavy-Duty Overhead	\$811.00
S	T03-22008-BABA	Headset, IS, Heavy-Duty Behind-Head	\$811.00
Carrying Case - Leather			
S	T03-22007-0001	Case, IS Hvy Duty Leather DStud B/Loop	\$66.00
S	T03-22007-0002	Case, IS Hvy Duty Leather Sprng Clip	\$57.00
S	T03-22007-0003	Case, IS Hvy Duty Leather B/Loop	\$51.00
S	T03-22007-0004	Case Bat, IS Hvy Duty Leather	\$42.00
S	T03-22007-0005	Case Bat, IS Hvy Duty Leather DStud	\$56.00
S	T03-22007-0006	Case Bat, IS Hvy Duty Leather Sprng Clip	\$48.00
S	T03-22007-0007	Case Bat, IS Hvy Duty Leather B/Loop	\$43.00
S	TPA-CA-208	Belt Clip Adaptor for 55mm	\$16.00
Programming Kits			
S	T03-22009-AAAA	TP93/94 IS Programming Adapter	\$225.00

TP9300



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TP3000

TP3000 DMR Tier 2 Portable Radio



L3Harris TP3000 DMR is a highly reliable, modern, digital radio solution that is designed for operation in critical environments. The TP3000 portables offer conventional analog and DMR operation (DMR Tier 2).

TP3300	TP3350
	
<p>Each TP3300 comes as a standard black radio body with an antenna, battery, belt clip, charger, multi-national plug pack, and the following features as standard:</p> <ul style="list-style-type: none"> • Conventional Analog • Conventional DMR Tier 2 • ARC4 Encryption • Voice Annunciations • IP67 Dust and Waterproof 	<p>Each TP3350 comes with radio body, antenna, battery, belt clip, charger, multi-national plug pack, and the following features as standard:</p> <ul style="list-style-type: none"> • Conventional Analog • Conventional DMR Tier 2 • ARC4 Encryption • Voice Annunciations • IP67 Dust and Waterproof • GPS • Bluetooth® • Man Down • Vibration Alert

TP3000

Step One (1 of 2) – Select one (1) radio body based on the frequency band and model.

E/C	Model Number	Description	List Price
TP3300 – VHF (136-174 MHz) – 0-Key			
S	TP3300-B1-A00H	Portable, TP3300, 136-174M, 0-Key, Blk	\$459.00

TP3300 – UHF (400-520 MHz) – 0-Key

S	TP3300-HG-A00H	Portable, TP3300, 400-480M, 0-Key, Blk	\$459.00
S	TP3300-H7-A00H	Portable, TP3300, 450-520M, 0-Key, Blk	\$459.00

TP3350 – VHF (136-174 MHz) – 0-Key

S	TP3350-B1-A00H	Portable, TP3350, 136-174M, 0-Key, Blk	\$550.00
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TP3350 – UHF (400-520 MHz) – 0-Key

S	TP3350-HG-A00H	Portable, TP3350, 400-480M, 0-Key, Blk	\$550.00
S	TP3350-H7-A00H	Portable, TP3350, 450-520M, 0-Key, Blk	\$550.00

Step Two (2 of 2) – OPTIONAL Factory-Fitted Front Covers – This option is only needed if a keypad type (4-key or 16-key) or colored front cover is required to be factory-installed on the radio in Step One. Select the radio part number from Step One above, choose the SVF-FIT option below to add the fitting fee, and select the desired front cover keypad type/color from the Accessory front cover list below.

E/C	Model Number	Description	List Price
S	SVF-FIT	Service, TP3000 Front Cover Fitting	\$29.00

TP3000 DMR Tier 2 Accessories

Front Covers – The front cover options below can be used to customize the keypad type and color of any TP3000 radio. These do not come fitted on the radio.

E/C	Model Number	Description	List Price
0-Key Covers			
S	TP3000-A00T-S	Front Cover, TP3000, 0-Key, Blk	\$18.00
S	TP3000-B00T-S	Front Cover, TP3000, 0-Key, Org	\$18.00
S	TP3000-C00T-S	Front Cover, TP3000, 0-Key, Grn	\$18.00
S	TP3000-D00T-S	Front Cover, TP3000, 0-Key, Gry	\$18.00
S	TP3000-E00T-S	Front Cover, TP3000, 0-Key, Wht	\$18.00
S	TP3000-F00T-S	Front Cover, TP3000, 0-Key, Red	\$18.00
S	TP3000-G00T-S	Front Cover, TP3000, 0-Key, Yel	\$18.00
S	TP3000-H00T-S	Front Cover, TP3000, 0-Key, Pnk	\$18.00

TP3000

E/C	Model Number	Description	List Price
4-Key Covers			
S	TP3000-A04T-S	Front Cover, TP3000, 4-Key, Blk	\$46.00
S	TP3000-B04T-S	Front Cover, TP3000, 4-Key, Org	\$46.00
S	TP3000-C04T-S	Front Cover, TP3000, 4-Key, Grn	\$46.00
S	TP3000-D04T-S	Front Cover, TP3000, 4-Key, Gry	\$46.00
S	TP3000-E04T-S	Front Cover, TP3000, 4-Key, Wht	\$46.00
S	TP3000-F04T-S	Front Cover, TP3000, 4-Key, Red	\$46.00
S	TP3000-G04T-S	Front Cover, TP3000, 4-Key, Yel	\$46.00
S	TP3000-H04T-S	Front Cover, TP3000, 4-Key, Pnk	\$46.00
16-Key Covers			
S	TP3000-A16T-S	Front Cover, TP3000, 16-Key, Blk	\$67.00
S	TP3000-B16T-S	Front Cover, TP3000, 16-Key, Org	\$67.00
S	TP3000-C16T-S	Front Cover, TP3000, 16-Key, Grn	\$67.00
S	TP3000-D16T-S	Front Cover, TP3000, 16-Key, Gry	\$67.00
S	TP3000-E16T-S	Front Cover, TP3000, 16-Key, Wht	\$67.00
S	TP3000-F16T-S	Front Cover, TP3000, 16-Key, Red	\$67.00
S	TP3000-G16T-S	Front Cover, TP3000, 16-Key, Yel	\$67.00
S	TP3000-H16T-S	Front Cover, TP3000, 16-Key, Pnk	\$67.00
Audio Accessories			
E/C	Model Number	Description	List Price
Speaker Microphones			
S	T03-00045-ERAA	Spkr Mic Light-Weight 3.5mm-Jack	\$63.00
S	T03-00045-FRAA	Spkr Mic Medium-Weight 3.5mm-Jack	\$67.00
Headsets			
S	T03-00046-EFAA	Headset L-Wt Behind-Hd Boom-Mic Fngr-PTT	\$76.00
Surveillance Kits			
S	T03-00047-BAAA	Covert Kit Eartube In Ear Lapel Mic PTT	\$54.00
S	T03-00047-CBAA	Covert Kit Earhanger Lapel Mic With PTT	\$54.00
S	T03-00053-0101	Ring PTT, Wired Light Duty (BT Use)	\$75.00
Ear Pieces			
S	T03-00120-AAAE	Eartube In-Ear 3.5mm	\$20.00
S	T03-00120-BAAE	Earhook 3.5mm	\$12.00
S	T03-00120-FAAE	Eartube Earhook 3.5mm	\$20.00

TP3000

Battery & Charger Options			
E/C	Model Number	Description	List Price
Battery Options			
S	T03-00330-AAAA	Battery, Li-Ion 2000mAh	\$78.00
Charger Options			
S	T03-00322-AAAA	Charger, Single Bay, w/ Plug Pack	\$52.00
S	T03-00320-AAAA	Charger, 6-Way, w/PSU	\$277.00
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00
Other Accessories			
E/C	Model Number	Description	List Price
Carrying Cases			
S	T03-00370-AAAA	Case, Nylon, D-Clip, Blk, TP3000	\$45.00
S	T03-00370-ABAA	Case, Nylon, Radio Clip, Blk, TP3000	\$38.00
Programming Kits			
S	T03-00360-AAAA	Kit, Pressure Test, TP3000	\$150.00
S	T03-00361-AAAA	Cable, Programming, TP3000	\$44.00
S	T03-00362-AAAA	Kit, Calibration Test Programming, TP3000	\$176.00
Demo Kits			
S	TP3000-WBBA	Demo Kit, TP3000 VHF, 3 Radios	\$1,860.00
S	TP3000-WABA	Demo Kit, TP3000 UHF, 3 Radios	\$1,860.00
S	TP3000-WABC	Demo Kit, TP3000, Audio Accessories	\$525.00

TP3000

Spare Antennas			
E/C	Model Number	Description	List Price
VHF Antenna Options			
S	T03-00340-BAAA	Antenna, TP3000, 135-174MHz	\$18.00
UHF Antenna Options			
S	T03-00340-GAAA	Antenna, 400-480MHz, TP3000	\$18.00
Spare Kits			
E/C	Model Number	Description	List Price
S	T03-00350-AAAA	Belt Clip, TP3000, Qty 10	\$35.00
S	T03-00351-AAAA	Knobs, TP3000, Vol Qty 10, Chnl Qty 10	\$28.00
S	T03-00352-AAAA	Pots, TP3000, Vol Qty 10, Chnl Qty 10	\$256.00
S	T03-00353-AAAA	Bumper Bar Kit, TP3000, Qty 10	\$35.00
S	T03-00354-AAAA	Sealing Kit, TP3000, Qty 10	\$35.00
S	T03-00355-AAAB	Harris Logo Label Kit, TP3000, Qty 100	\$16.00
S	T03-00364-AAAA	Die-Cut Labels, Blank, TP3000, Qty 500	\$172.00
Demo Case Spares			
E/C	Model Number	Description	List Price
S	TP3000-VABA	Demo Case, TP3000, 3 Radios	\$75.00
S	TP3000-VABB	Demo Case, TP3000, 6 Radios	\$75.00
S	TP3000-VABC	Demo Case, TP3000, Audio Accessories	\$75.00
S	TP3000-VAAD	Demo Instrument Case, TP3000	\$19.00

TP3000

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TM9300

TM9300 DMR Mobile Radios



The L3Harris TM9300 mobiles build on the strengths of our analog and MPT 1327 mobile products with your organizational requirements in mind. The TM9300 offer trunked DMR operation as well as conventional DMR operation, full MPT 1327, and conventional FM functionality in one device. Roaming between DMR and MPT networks is supported.

Each radio comes with the following hardware features as standard:

- MPT Trunking
- Alphanumeric ID
- GPS Hardware/Location Services
- Voice Annunciations
- DMR Conventional
- ARC4 Encryption

Step One (1 of 5) – Pick one (1) radio body based on the frequency band, power, and connector.

E/C	Model Number	Description	List Price
VHF (136-174 MHz) – Low Power (25W)			
S	TM9300B1AA	Mobile, TM9300, 136-174M 25W, BNC, Alm	\$475.00
S	TM9300B1BA	Mobile, TM9300, 136-174M 25W, M-UHF, Alm	\$475.00
VHF (136-174 MHz) – High Power (50W)			
S	TM9300B1CA	Mobile, TM9300, 136-174M 50W, BNC, Alm	\$552.00
S	TM9300B1DA	Mobile, TM9300, 136-174M 50W, M-UHF, Alm	\$552.00
220 MHz (174-225 MHz) – Low Power (25W)			
S	TM9300C0AA	Mobile, TM9300, 174-225M 25W, BNC, Alm	\$475.00
S	TM9300C0BA	Mobile, TM9300, 174-225M 25W, M-UHF, Alm	\$475.00
UHF-L (400-470 MHz) – Low Power (25W)			
S	TM9300H5AA	Mobile, TM9300, 400-470M 25W, BNC, Alm	\$475.00
S	TM9300H5BA	Mobile, TM9300, 400-470M 25W, M-UHF, Alm	\$475.00

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E/C	Model Number	Description	List Price
UHF-L (400-470 MHz) – High Power (40W)			
S	TM9300H5CA	Mobile, TM9300, 400-470M 40W, BNC, Alm	\$552.00
S	TM9300H5DA	Mobile, TM9300, 400-470M 40W, M-UHF, Alm	\$552.00
UHF-H (450-520 MHz) – Low Power (25W)			
S	TM9300H7AA	Mobile, TM9300, 450-520M 25W, BNC, Alm	\$475.00
S	TM9300H7BA	Mobile, TM9300, 450-520M 25W, M-UHF, Alm	\$475.00
UHF-H (450-520 MHz) – High Power (40W)			
S	TM9300H7CA	Mobile, TM9300, 450-520M 40W, BNC, Alm	\$552.00
S	TM9300H7DA	Mobile, TM9300, 450-520M 40W, M-UHF, Alm	\$552.00
700/800 MHz (764-870 MHz) – High Power (35W)			
S	TM9300K5CA	Mobile, TM9300, 762-870M 35W, BNC, Alm	\$552.00
S	TM9300K5DA	Mobile, TM9300, 762-870M 35W, M-UHF, Alm	\$552.00
900 MHz (896-941 MHz) – High Power (30W)			
S	TM9300L3DA	Mobile, TM9300, 896-941M 30W, M-UHF, Alm	\$552.00

TM9300**Step Two (2 of 5) – Power Cable Install Kit Option. Select the power cable based on the power and connector selected above**

E/C	Model Number	Description	List Price
S	T02-00026-1001	Cable, Install Kit, BNC, 25W	\$37.00
S	T02-00026-1002	Cable, Install Kit, M-UHF, 25W	\$37.00
S	T02-00026-1003	Cable, Install Kit, BNC, 30-50W	\$67.00
S	T02-00026-1004	Cable, Install Kit, M-UHF, 30-50W	\$67.00

Step Three (3 of 5) – Control Head & Microphone Configuration Option. Select the option that best fits the configuration you desire and pick one (1) part from each table within that option.

E/C	Model Number	Description	List Price
Option 1: Fixed Head Operation – 2 Digit Control Head			
S	T02-00076-AAAC	Cntrl Head, 2Digit, Blk	\$176.00

Option 1: Fixed Head Operation – Microphones			
S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00

Option 2: Fixed Head Operation – Graphical Control Heads			
S	T02-00071-AAAC	Cntrl Head, Local Fixed, Blk	\$199.00
S	T02-00071-AABC	Cntrl Head, Local Fixed, Yel	\$249.00
S	T02-00071-AAEC	Cntrl Head, Local Fixed, Grn	\$249.00

Option 2: Fixed Head Operation – Microphones			
S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00

Option 3: Single Remote Head Operation – Control Heads			
S	T02-00071-CAAC	Cntrl Head, Primary Rmt, Blk	\$286.00
S	T02-00071-CABC	Cntrl Head, Primary Rmt, Yel	\$336.00
S	T02-00071-CAEC	Cntrl Head, Primary Rmt, Grn	\$336.00

Option 3: Single Remote Head Operation – Remote Cables			
S	T02-00061-3001	Single Remote Head Kit, 20ft	\$107.00
S	T02-00061-3002	Single Remote Head Kit, 40ft	\$289.00
S	T02-00061-3003	Single Remote Head Kit, 60ft	\$337.00

Option 3: Single Remote Head Operation - Microphones			
S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00

E/C	Model Number	Description	List Price
Option 4: Hand Held Control Head Operation – Control Heads			
S	T02-00063-1015	Ctrl Head, Primary Rmt, HHCH, Blk	\$282.00
S	T02-00063-1005	Ctrl Head, Primary Rmt, HHCH, Yel	\$332.00
S	T02-00063-1009	Ctrl Head, Primary Rmt, HHCH, Red	\$332.00
S	T02-00063-1013	Ctrl Head, Primary Rmt, HHCH, Grn	\$332.00
Option 4: Hand Held Control Head Operation – Remote Cables			
S	T02-00009-0201	Cable, Curly Extension, HHCH 5ft	\$28.00
S	T02-00009-0202	Cable, Curly Extension, HHCH 10ft	\$38.00
S	T02-00009-0203	Cable, Curly Extension, HHCH 20ft	\$46.00
S	T02-00009-0204	Cable, Curly Extension, HHCH 30ft	\$79.00
Option 4: Hand Held Control Head Operation – External Speakers			
S	T02-00004-0204	Speaker, External, 10W for 25W Radio	\$73.00
S	T02-00004-0205	Speaker, External, 10W for 30-50W Radio	\$73.00
Option 5: Dual Remote Head Operation – Primary Control Heads			
S	T02-00071-CAAC	Cntrl Head, Primary Rmt, Blk	\$286.00
S	T02-00071-CABC	Cntrl Head, Primary Rmt, Yel	\$336.00
S	T02-00071-CAEC	Cntrl Head, Primary Rmt, Grn	\$336.00
Option 5: Dual Remote Head Operation – Remote Cable			
S	T02-00062-3001	Dual Remote Head Kit, 60ft	\$383.00
Option 5: Dual Remote Head Operation – Primary Control Head Microphones			
S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00
Option 5: Dual Remote Head Operation – Secondary Control Heads			
S	T02-00071-DAAC	Cntrl Head, Secondary Rmt, Blk	\$274.00
S	T02-00071-DABC	Cntrl Head, Secondary Rmt, Yel	\$324.00
S	T02-00071-DAEC	Cntrl Head, Secondary Rmt, Grn	\$324.00
Option 5: Dual Remote Head Operation – Secondary Control Head Microphones			
S	T02-00005-AAAC	Standard Microphone	\$80.00
S	T02-00005-AABC	Standard Microphone, 10ft Curly Cord	\$90.00

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E/C	Model Number	Description	List Price
S	T02-00005-ABAC	Keypad Microphone	\$180.00
S	T02-00005-ABBC	Keypad Microphone, 10ft Curly Cord	\$190.00
Option 5: Fixed Control Head Operation – Programming			
S	T02-00085-AAAA	Cntrl Head, Programming Fixed	\$104.00
Option 6: Desktop Configuration			
Power Supply			
S	T02-00036-AACA	Desktop Power Supply 13V8 23A DC	\$295.00
Desktop Cradle Cable Kits			
S	T02-00026-1001	Cable, Install Kit, BNC, 25W	\$37.00
S	T02-00026-1002	Cable, Install Kit, M-UHF, 25W	\$37.00
S	T02-00026-1003	Cable, Install Kit, BNC, 30-50W	\$67.00
S	T02-00026-1004	Cable, Install Kit, M-UHF, 30-50W	\$67.00
Desktop Power Supply Hardware Kits			
S	T02-00026-3002	Install Kit, U-Cradle, Desktop Power	\$83.00
S	T02-00026-3001	Install Kit, Plinth, Desktop Power	\$83.00
Desktop Microphone			
S	T02-00005-ACAA	Desktop Microphone	\$187.00
Optional Mobile Cradle Mounting Hardware Kits			
S	T02-00026-2001	Mounting Kit, U-Cradle	\$21.00
S	T02-00026-2002	Mounting Kit, Security Cradle	\$109.00
S	T02-00026-2004	Mounting Kit, Universal	\$75.00
S	T02-00026-2006	Mounting Kit, Dual	\$65.00

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E/C	Model Number	Description	List Price
Optional UnifiedVehicle Upgrade Kits			
UnifiedVehicle Upgrade Options			
S	TU2000M0000000000A	Upgrade Kit UV Fixed Head No Cell NoAnt	\$522.00
S	TU2000M0000000000B	Upgrade Kit UV Remote Head No Cell NoAnt	\$381.00
S	TU2000M4000000000A	Upgrade Kit UV Fixed Head NACell x3Ant	\$884.00
S	TU2000M4000000000B	Upgrade Kit UV Remote Head NACell x3Ant	\$743.00
UnifiedVehicle External Antenna Options			
S	T05-00031-0001	Antenna, UVe MultiElement Ext BNC Adptr	\$466.00
S	T05-00031-0002	Antenna, UVe MultiElement Ext MUHF Adptr	\$466.00
S	T05-00031-0003	Antenna, UVe MultiElement Ext (No Adptr)	\$466.00
S	T05-00031-0004	Antenna, UVe WiFi 2.4/5GHz Ext SMA	\$111.00

TM9300

Step Four (4 of 5) – Radio body above comes in standard Analog mode. If desired, pick an operating mode and any additional add on software feature options. Please refer to the notes in red to determine if there is a prerequisite for any of the software features below.

E/C	Model Number	Description	List Price
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System Enablers – Software Features

S	TMAS080	SFE - DMR Trunking	\$200.00
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Encryption – Software Features

S	TMAS095	SFE - Multi Key DES Encryption (Not available 2 Digit Control Heads)	\$53.00
S	TMAS058-DMR	SFE - Multi Key AES Encryption (TMAS095 Prerequisite)	\$200.00

Data Enablers – Software Features

S	TMAS056-DMR	SFE - User IP Data	\$137.00
S	TMAS105-DMR	SFE – Geofencing Services	\$120.00
S	TMAS075-DMR	SFE - DMR OTAP	\$50.00

System Administration Enablers – Software Features

S	TMAS060	SFE - Tait Radio API	\$136.00
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Radio Enhancement Enablers – Software Features

S	TMAS083	SFE - 20/25kHz Wideband Enable (Not available to US FCC-regulated customers)	\$0.01
S	TMAS089-DMR	SFE - Enhanced Location Reporting	\$0.01

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.

Step Five (5 of 5) – Select any additional accessories desired

E/C	Model Number	Description	List Price
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Accessories – Microphones and Speakers

S	T02-00005-ADAA	Handsfree Microphone	\$116.00
S	T02-00004-0101	Telephone Handset	\$651.00
S	T02-00004-0204	Speaker, External, 10W for 25W Radio	\$73.00
S	T02-00004-0205	Speaker, External, 10W for 30-50W Radio	\$73.00
S	T02-00004-0201	Speaker, Horn, 112dB SPL for 25W Radio	\$185.00
S	T02-00004-0202	Speaker, Horn, 112dB SPL for 30-50W Radio	\$185.00

Accessories – Cables

S	T02-00009-0101	Cable Shielded 8 Core RJ45 Grommet 2ft	\$21.00
S	T02-00009-0102	Cable Shielded 8 Core RJ45 Grommet 5ft	\$26.00
S	T02-00009-0103	Cable Shielded 8 Core RJ45 Grommet 20ft	\$46.00
S	T02-00009-0104	Cable Shielded 8 Core RJ45 Grommet 40ft	\$94.00
S	T02-00009-0105	Cable Shielded 8 Core RJ45 Grommet 10ft	\$39.00
S	T02-00063-2001	HHCH Cables & Interface Box Kit	\$395.00
S	T02-00034-EAAA	Cable Ignition Sense 13ft	\$54.00
S	TMAA10-10	Remote PTT + Microphone for HHCH B-Box	\$174.00

Accessories – GPS Receivers and Accessories

RF Antenna is not included. Please purchase as a separate item.

S	TMAA05-01	GPS Receiver Garmin Flush Mount	\$383.00
S	TMAA05-02	Magnetic Mount Kit for TMAA05-01	\$41.00
S	TMAA05-03	Plate Mount Kit for TMAA05-01	\$20.00
S	TMAA05-04	GPS Receiver Garmin Magnetic Mount	\$419.00
S	TMAA05-05	GPS Receiver PCTEL Magnetic Mount	\$304.00
S	TMAA05-06	GPS Receiver PCTEL Through Hole Mount	\$314.00

Programming & Service Kits

S	T02-00031-0002	P25 Programming & Calibration Kit	\$450.00
S	T02-00031-0007	TM93/94 Service Kit	\$615.00
S	TOPA-SV-024	Terminals Calibration Box	\$235.00
S	T03-00118-0601	USB to RJ11 Programming Cable	\$120.00
S	TMAA20-02	Adaptor RJ45 to DB9 Adaptor	\$30.00
S	TMAA20-03	Cable 25W Radio Pwr to Banana Plug	\$59.00
S	TMAA20-04	Adaptor RJ12 Socket/RJ45 Plug	\$27.00
S	TMAA21-01	Cable DB15 Socket/RJ45 Plug	\$116.00

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TB9300

TB9300 DMR Base Stations

The TB9300 DMR base station is a multimode repeater that supports **DMR Tier II Conventional, DMR Tier III Trunking, Analog and MPT-IP** modes of operation.

The TB9300 sets the standard for high-performing radio communications technology. This software-flexible product is built on a foundation of flexibility for system integration, modularity and robustness.

All TB9300 systems offer continuous duty cycle operation at full performance specifications within the complete temperature and altitude range.

With flexible, modular design and practical features, the TB9300 raises the bar for DMR base stations/repeaters.

Its practical features coupled with impressive RF performance to really make a difference in high interference/RF sites makes the TB9300 the next generation base station.



The TB9300 offers the following features:

- Full IP connectivity allows efficient scaling and design of your network
- Full remote control, diagnostics & self-monitoring capability
- Compact 4U rack profile
- Choice of single 100W or single 50W or dual 50W configurations per subrack
- Programmable power input in 1W steps, per channel
- Seamless backup battery operation and charging with ACDC supply
- Analog Repeater (single site)

Frequency	50W	100W	50W Dual
148-174MHz	✓	✓	✓
216-225MHz		✓	
400-440MHz	✓	✓	✓
440-480MHz	✓	✓	✓
470-520MHz	✓	✓	✓
762-870MHz	✓	✓	✓
896-941MHz		✓	

Step One (1 of 4) – Select a chassis based on the RF Power

E/C	Model Number	Description	List Price
50 Watt Single-Channel Chassis			
S	TB9315S-050H	Chassis, TB9300, Single, 50W	\$1,278.00
50 Watt Dual-Channel Chassis			
S	TB9315D-050H	Chassis, TB9300, Dual, 50W	\$1,278.00
100 Watt Single-Channel Chassis			
S	TB9335S-100H	Chassis, TB9300, Single, 100W	\$1,278.00

TB9300

Step Two (2 of 4) – Select Reciter and Power Amplifier based on the chassis selected above. Be sure to match the frequency band of the Reciter with that of the Power Amplifier.

E/C	Model Number	Description	List Price
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Option 1 – TB9300 Reciter for Single 50W Options

S	T01-01105-DAAA	Reciter, TB9300, 148-174MHz	\$2,243.00
S	T01-01105-KAAA	Reciter, TB9300, 400-440MHz	\$2,243.00
S	T01-01105-LAAA	Reciter, TB9300, 440-480MHz	\$2,243.00
S	T01-01105-NAAA	Reciter, TB9300, 762-870MHz	\$2,243.00

Option 1 – TB9300 Power Amp for Single 50W Options

S	T01-01136-CAAC	Constant Env PA, TB9300, 136-174MHz, 50W	\$1,292.00
S	T01-01136-JAAC	Constant Env PA, TB9300, 380-520MHz, 50W	\$1,292.00
S	T01-01136-NAAA	Constant Env PA, TB9300, 762-870MHz, 50W	\$1,292.00

Option 2 – TB9300 Reciter for Dual 50W Options

Select two (2) for dual configuration

S	T01-01105-DAAA	Reciter, TB9300, 148-174MHz	\$2,243.00
S	T01-01105-KAAA	Reciter, TB9300, 400-440MHz	\$2,243.00
S	T01-01105-LAAA	Reciter, TB9300, 440-480MHz	\$2,243.00
S	T01-01105-NAAA	Reciter, TB9300, 762-870MHz	\$2,243.00

Option 2 – TB9300 Reciter for Dual 50W Options

Select two (2) for dual configuration

S	T01-01136-CAAC	Constant Env PA, TB9300, 136-174MHz, 50W	\$1,292.00
S	T01-01136-JAAC	Constant Env PA, TB9300, 380-520MHz, 50W	\$1,292.00
S	T01-01136-NAAA	Constant Env PA, TB9300, 762-870MHz, 50W	\$1,292.00

TB9300

E/C	Model Number	Description	List Price
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Option 3 – TB9300 Reciter for Single 100W Options

S	T01-01105-CAAA	Reciter, TB9300, 136-156MHz	\$2,243.00
S	T01-01105-DAAA	Reciter, TB9300, 148-174MHz	\$2,243.00
S	T01-01105-FAAA	Reciter, TB9300, 216-225MHz	\$2,243.00
S	T01-01105-KAAA	Reciter, TB9300, 400-440MHz	\$2,243.00
S	T01-01105-LAAA	Reciter, TB9300, 440-480MHz	\$2,243.00
S	T01-01105-NAAA	Reciter, TB9300, 762-870MHz	\$2,243.00
S	T01-01105-QAAA	Reciter, TB9300, 896-941MHz	\$2,243.00

Option 3 – TB9300 Reciter for Single 100W Options

S	T01-01136-CBAC	Constant Env PA, TB9300, 136-174MHz,100W	\$1,816.00
S	T01-01136-EBAA	Constant Env PA, TB9300, 174-225MHz,100W	\$1,816.00
S	T01-01136-JBAC	Constant Env PA, TB9300, 380-520MHz,100W	\$1,816.00
S	T01-01136-NBAA	Constant Env PA, TB9300, 762-870MHz,100W	\$1,816.00
S	T01-01136-QBAA	Constant Env PA, TB9300, 850-941MHz,100W	\$1,816.00

TB9300

Step Three (3 of 5) – Select Power Management Unit (PMU) option based on power input			
E/C	Model Number	Description	List Price
DC Options – PMU 12VDC			
S	TBA3001-1100	PMU, TB9000, 12VDC Aux12V	\$1,889.00
S	TBA3001-1200	PMU, TB9000, 12VDC Aux24V	\$1,889.00
S	TBA3001-1400	PMU, TB9000, 12VDC Aux48V	\$1,889.00
DC Options – PMU 24VDC			
S	TBA3002-2100	PMU, TB9000, 24VDC Aux12V	\$1,889.00
S	TBA3002-2200	PMU, TB9000, 24VDC Aux24V	\$1,889.00
S	TBA3002-2400	PMU, TB9000, 24VDC Aux48V	\$1,889.00
DC Options – PMU 48VDC			
S	TBA3004-4100	PMU, TB9000, 48VDC Aux12V	\$1,889.00
S	TBA3004-4200	PMU, TB9000, 48VDC Aux24V	\$1,889.00
S	TBA3004-4400	PMU, TB9000, 48VDC Aux48V	\$1,889.00
AC Options – PMU			
S	TBA30A0-0100	PMU, TB9000, AC Aux12	\$1,889.00
S	TBA30A0-0200	PMU, TB9000, AC Aux24	\$1,889.00
S	TBA30A0-0400	PMU, TB9000, AC Aux48	\$1,889.00
Mains Power Cable			
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00
AC/DC Options – PMU 12VDC			
S	TBA30A1-1100	PMU, TB9000, 12VACDC Aux12V	\$2,501.00
S	TBA30A1-1200	PMU, TB9000, 12VACDC Aux24V	\$2,501.00
S	TBA30A1-1400	PMU, TB9000, 12VACDC Aux48V	\$2,501.00
AC/DC Options – PMU 24VDC			
S	TBA30A2-2100	PMU, TB9000, 24VACDC Aux12V	\$2,501.00
S	TBA30A2-2200	PMU, TB9000, 24VACDC Aux24V	\$2,501.00
S	TBA30A2-2400	PMU, TB9000, 24VACDC Aux48V	\$2,501.00

TB9300

E/C	Model Number	Description	List Price
AC/DC Options – PMU 48VDC			
S	TBA30A4-4100	PMU, TB9000, 48VACDC Aux12V	\$2,501.00
S	TBA30A4-4200	PMU, TB9000, 48VACDC Aux24V	\$2,501.00
S	TBA30A4-4400	PMU, TB9000, 48VACDC Aux48V	\$2,501.00
Mains Power Cable			
S	219-01561-00	Cable, PMU IEC, 6.5ft	\$13.00

Step Four (4 of 5) – Select Software Feature Enablers (SFEs) based on the configuration needed

E/C	Model Number	Description	List Price
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Option 1 – DMR Tier II (Conventional) and Voting with Simulcast Enablers

Select SFE option below then move on to simulcast enablers if simulcast design is required.

S	TBAS304	SFE - DMR Conventional	\$220.00
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Simulcast Enablers

This is needed if you are designing a simulcast system. At least one master site/central voter is required in simulcast designs.

Master Site

S	TBAS306	SFE - DMR Central Voter (Master) (TBAS304 Prerequisite)	\$5,448.00
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Satellite Site

S	TBAS307	SFE - DMR IP Networking (Satellite)	\$860.00
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Note: If a Dual configuration has been selected in step 1 above, repeat this option to select second channel software.**Option 2 – DMR Tier III (Trunking) and Voting with Simulcast Enablers**

Select one of the following trunking options below then move on to simulcast enablers if simulcast design is required.

Option 2A: DMR Trunking (Access) Enabler

Preferred choice for designs involving only one (1) functional site (i.e. one simulcast cell or a single site)

S	TBAS303	SFE - DMR Trunking (Access)	\$2,205.00
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Option 2B: DMR Trunking (Express6) Enabler

Preferred choice for designs involving up to six (6) functional sites. A single simulcast cell is considered one functional site.

S	TBAS302	SFE - DMR Trunking (Express6)	\$3,098.00
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Option 2C: DMR Trunking (Express20) Enabler

Preferred choice for designs involving up to twenty (20) functional sites. A single simulcast cell is considered one functional site.

S	TBAS305	SFE - DMR Trunking (Express20)	\$4,373.00
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Option 2D: DMR Trunking (Full) Enabler

Preferred choice for designs involving more than twenty (20) functional sites. A single simulcast cell is considered one functional site.

S	TBAS300	SFE - DMR Trunking (Full)	\$6,400.00
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Simulcast Enablers

This is needed if you are designing a simulcast system. At least one master site/central voter is required in simulcast designs.

Master Site

S	TBAS306	SFE - DMR Central Voter (Master) (TBAS300 or TBAS302 or TBAS303 or TBAS305 Prerequisite)	\$5,448.00
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Satellite Site

S	TBAS307	SFE - DMR IP Networking (Satellite)	\$860.00
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Note: If a Dual configuration has been selected in step 1 above, repeat this option to select second channel software.

TB9300

Step Five (5 of 5) – Select any additional standalone accessories desired			
E/C	Model Number	Description	List Price
S	TBAA03-13	Auxiliary Support Bracket, TB8/9	\$35.00
S	TBAA03-16	Carrying Handles, TB8/9	\$43.00
S	T01-01150-0002	Upgrade Kit, Single Channel, TB9300	\$71.00

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TB7300

TB7300 DMR Base Stations

The L3Harris TB7300 is a multimode slimline repeater **that supports DMR Tier II Conventional, DMR Tier III Trunking, Analog and MPT-IP modes of operation.** A slim, 1U design forms part of an intelligent building block of an end-to-end network solution, which includes base stations, terminals and network management software applications.

The TB7300 offers you the following features:

- Economical slim 1U design
- Three Operating modes DMR Tier 3, Tier 2, and Analog
- Software flexible migration path between platforms
- Exceptional receiver performance
- IP linked node solution for multi-site network capability
- Remote network management and monitoring
- SNMP management capability
- TaitEnable application suite compatible
- Tait DMR access and express solution compatible
- 50-Watt output power (VHF) 100% duty cycle
- 13.8VDC Input power typical

Frequency	Power
148-174 MHz	50W
400-470 MHz	40W
470-520 MHz	40W



Full Solutions with Software Included			
E/C	Model Number	Description	List Price
TB7300 Conventional Trunked (<i>Analog software feature included</i>)			
S	TB7310B3B000000000	Station, TB7300, Single, 148-174MHz, 50W	\$3,300.00
S	TB7310H3B000000000	Station, TB7300, Single, 470-520MHz, 40W	\$3,300.00
S	TB7310H5B000000000	Station, TB7300, Single, 400-470MHz, 40W	\$3,300.00
TB7300 Conventional Trunked (<i>TBAS300 software feature included</i>)			
S	TB7310B3B00000000AA	DMR Conv Trk 50W 148-174MHz	\$9,700.00
S	TB7310H3B00000000AA	DMR Conv Trk 40W 470-520MHz	\$9,700.00
S	TB7310H5B00000000AA	DMR Conv Trk 40W 400-470MHz	\$9,700.00
TB7300 DMR Tier III Express6 Multisite Trunking (<i>TBAS302 software feature included</i>)			
S	TB7310B3B00000000AC	DMR Express With Analog 50W 148-174MHz	\$6,398.00
S	TB7310H3B00000000AC	DMR Tier3 EXP6 40W 470-520MHz	\$6,398.00
S	TB7310H5B00000000AC	DMR Express with Analog 40W 400-470MHz	\$6,398.00

TB7300

E/C	Model Number	Description	List Price
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TB7300 DMR Tier III Access Single Site Trunking (TBAS303 software feature included)

S	TB7310B3B0000000AD	DMR Access with Analog 50W 148-174MHz	\$5,505.00
S	TB7310H3B0000000AD	DMR Tier3 Access 40W 470-520MHz	\$5,505.00
S	TB7310H5B0000000AD	DMR Access with Analog 40W 400-470MHz	\$5,505.00

TB7300 DMR Tier II Conventional (TBAS304 software feature included)

S	TB7310B3B0000000AE	CNV with Analog 50W 148-174M	\$3,520.00
S	TB7310H3B0000000AE	DMR Tier2 Conv 40W 470-520MHz	\$3,520.00
S	TB7310H5B0000000AE	DMR Cnv with Analog 40W 400-470MHz	\$3,520.00

TB7300 DMR Tier III Express20 Multisite Trunking (TBAS305 software feature included)

S	TB7310B3B0000000AF	DMR Express 20 Analog 50W 148-174MHz	\$7,673.00
S	TB7310H3B0000000AF	DMR Tier3 EXP20 40W 470-520MHz	\$7,673.00
S	TB7310H5B0000000AF	DMR Express 20 Analog 40W 400-470MHz	\$7,673.00

TB7300 Software Feature Options

E/C	Model Number	Description	List Price
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S	TBAS300	SFE – DMR Trunking	\$6,400.00
S	TBAS302	SFE – DMR Express6	\$3,098.00
S	TBAS303	SFE – DMR Access	\$2,205.00
S	TBAS304	SFE – DMR Conventional	\$220.00
S	TBAS305	SFE – DMR Express20	\$4,373.00
S	TBAS306	SFE – DMR Central Voter (Master)	\$5,448.00
S	TBAS307	SFE – DMR IP Networking (Satellite)	\$860.00

TB7300 Transportable Repeater Options

E/C	Model Number	Description	List Price
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S	TB7304-B370	Tran Rpt DMR Tier2 152-174 AC/DC S10-16M	\$14,928.00
S	TB7304-H580	Tran Rpt DMR Tier2 400-470 AC/DC S5-7M	\$14,928.00

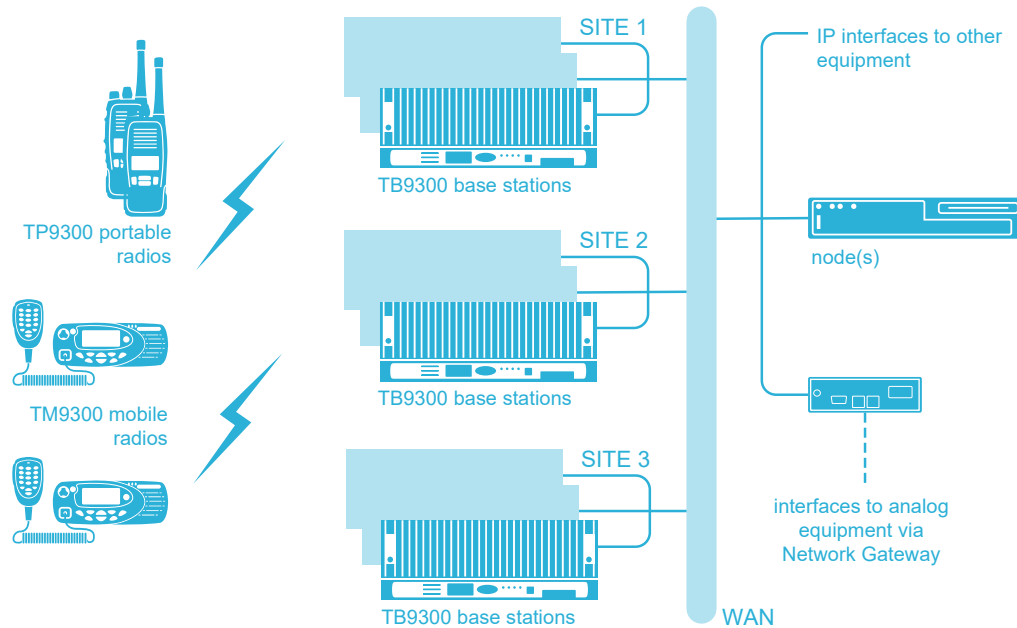
TN9300 Core Networks – DMR

► TAIT DMR Systems (Tier 2 & Tier 3)



Network Overview

A basic L3Harris-Tait Conventional or Trunked DMR network consists of centralized core network equipment, which controls the operation of the network, and a number of sites, each of which consists of several base stations/repeaters linked over an IP backbone network to form a wide area network. Non-DMR base stations/repeaters (e.g. Analog, Actionnet, P25) can be integrated into this network via one or more L3Harris-Tait gateways.



Example Diagram: DMR Tier 3 system with 3 sites

The base stations/repeaters at a site provide the radio frequency (RF) interface to the radios.

A single-site Conventional or Trunking system can operate without centralized core network equipment (See DMR Access solution below, or DMR Tier 2 single-site operations with no wider system connectivity).

The DMR system uses digital modulation and 2-slot TDMA (time division multiple access) on the RF path between the base stations and the mobile radios. TDMA divides up the frequency spectrum using timeslots whereby user A gets a few milliseconds of access to the spectrum, then it's the turn of user B so that one base station provides two "logical" channels on each 12.5kHz bandwidth transmit and receive frequency (one on each timeslot).

For DMR Tier 3 Trunking operation, at each site, there are one or more control channels and a number of traffic channels. Multiple control channels are used if there are a large number of radios using the site or if there is a lot of data traffic (e.g. the Short Data Service (SDS) or GPS location data) on the control channel. The radios are configured to prefer one control channel. Two control channels can be on the same base station (using both timeslots) or on different base stations (using one timeslot from each). Whether a logical channel operates as a control channel or a traffic channel is determined by the node and can be configured to meet your organizational requirements.

For DMR Tier 2 Conventional operation, the Channel Controller is only necessary for system connectivity (i.e. AIS Dispatch connection) and IP linked multi-site operations.

Network Elements

- DMR Tier 3 Node Controller - controls the call setup, generates and stores call records and raises alarms.
- DMR Tier 2 Channel Controller is the equivalent of a DMR Tier 3 Node Controller.
- Base station/Repeater - provides the RF path to and from the mobile and portable radios for the voice or data communications.
- Network gateway - provides an interface to equipment and systems outside of the DMR system.
- IP backbone - interconnects the various elements of the DMR network.
- Network Management –EnableMonitor, EnableReport and EnableFleet.
- A full L3Harris-Tait DMR solution will, as indicated in the diagram above, integrate a wide variety of third-party elements like voice recorders, dispatchers and applications.

TN9300 DMR

Product Codes for Commercial Packages

Edition: 11

DMR

Hardware / Software / Ancillary Options and Licence configuration

Commercial Product Identifier

T N 9 3 XX - XXXX - XXXX - X XXX - 10

Product Type

00= DMR Server Install (HW + SW)
20 = Software Install - Solaris
21 = Software Install - Centos

Hardware / Software Options

XXXX

Power Input

0 = None
1 = 110-240VAC
2 = 48VDC
3 = 12VDC

Future Options

0 = None

Ancillary Options

XXXXX

Ancillary Options
0000-00 = None

Hardware/Software Encryption Options

Hardware Platform Licence Options

X XXX

Encryption Options
0 = None
1 = AES Enabled Encryption

Point of Package Assembly or Custom Product

10

Product Type

1 = DMR Trunked - Node (Tier 3 Full or Express)
2 = DMR Conventional - Node (Tier 2)
3 = DMR Trunked + SCADA Gateway - Node + SCADA (Tier3)
4 = DMR SCADA Gateway - SCADA (Tier3)

Server Hardware Options	Tier3 Full	Tier3 Express20	Tier3 Express6	Tier2	Tier3 Full or Express6/20 + SCADA	Tier3 SCADA
0 = High Level - Kontron CG2300 Server	Yes	Yes	Yes	No	Yes	Yes
1 = Mid Level - Dell R230 Server	¹ Yes	¹ Yes	Yes	Yes	Yes	Yes
2 = Low Level - SBOX-2620 Server	No	No	Yes	Yes	On Request	On Request
3 = Software Only Install	² Tait Service	² Tait Service	² Tait Service	No	^{2,3} Tait Service	^{2,3} Tait Service
4 = High Level - Dell R630 Server	Yes	Yes	Yes	No	Yes	Yes

Node Licence Options

00 = None
AA = TNAS300 DMR Trunking Node without High Availability
AB = TNAS301 DMR Trunking Node with High Availability
AC = TNAS320 DMR Trunking Express6
AE = TNAS310 DMR Conventional Node
AF = TNAS321 DMR Trunking Express20

¹ Recommended to be ordered as a H/A (High Availability) configuration

² To be installed by Tait on a Valid Server configuration

³ For install on existing Node

Network Packaging Number example

TN9300-1101-0000-00AC-10 DMR Tier III Express6 Node Controller Mid Level 110-230VAC

Contains:

TNAS320 License TaitNet DMR - DMR Express6 x1
005-00207-00 SERVER Dell PowerEdge R230 x1
219-01002-00 CBL cord 2m Eur IEC x1
219-01561-00 CBL cord 2m USA IEC blk x1
219-01000-00 CBL cord 2.5m ANZ IEC x1

DMR Server Platform Options

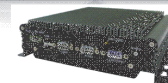
High Level
Kontron



Mid Level
Dell



Low Level
SBOX-2620



DMR Tier 3 - Network Dimensions

The following table gives the maximum dimensions of a DMR Trunking network with high-level server.

ELEMENT	LIMITS
Sites / Network	250
Control Channels / Network	250
Physical Channels / Network	1000 (2000 logical channels)
Physical Channels / Site	20 (40 logical channels)
Nodes / Network	20
Active Audio Connections / Node Each active connection consists of: <ul style="list-style-type: none"> ▪ reciter logical channel ▪ network gateway ▪ a call on an AIS trunk ▪ a call on an SIP trunk 	250
Audio latency (from PTT including any required call setup to audio out of b party)	400 ms ¹
Network Gateways / Network	300 (planned but untested)
DIP Connections	300 (planned but untested)
Concurrent SIP Calls	300 (planned but untested)
Maximum node to base station link latency	900 ms round trip time (planned but untested)

¹Could be longer in late entry with encryption.

Where smaller networks are required, the DMR Express or DMR Access licensed networks are available as follows:

- **DMR Express20** has the following maximum dimensions, and requires Express licenses for the node and TB9300 or TB7300 reciters with mid-level server:

ELEMENT	LIMITS
Sites / Network	20
Physical Channels / Network	80
Nodes / Network	1+1 (if HA option)

- **DMR Express6** has the following maximum dimensions, and requires Express licenses for the node and TB9300 or TB7300 reciters with mid-level server:

ELEMENT	LIMITS
Sites / Network	6
Physical Channels / Network	24 (48 logical channels)
Nodes / Network	1

- **DMR Access** is for single-site systems that do not require a node controller as such, and has the following maximum dimensions. Access SFE keys are installed in the TB9300 or TB7300 reciters:

ELEMENT	LIMITS
Sites / Network	1
Physical Channels / Network	4 (8 logical channels)
Nodes / Network	Standalone

DMR Tier 2 - Network Dimensions

The following table gives the maximum dimensions of a DMR Conventional network. DMR Tier 2 SFE keys are installed in the TB9300 or TB7300 reciters.

ELEMENT	LIMITS
Sites / Network	20
RF Channels / Site	40 (80 logical channels)
Channel Controller / Network	1 +1 (if HA option)

Network Hardware

ITEM CODE	DESCRIPTION
Hardware	
TN9300-1001-0000-0000-10	DMR Tier 3 Trunked Node Controller High-Level 110-230VAC
TN9300-1002-0000-0000-10	DMR Tier 3 Trunked Node Controller High-Level 48VDC
TN9300-1101-0000-0000-10	DMR Tier 3 Trunked Node Controller Mid-Level 110-230VAC
TN9300-1201-0000-0000-10	DMR Tier 3 Trunked Node Controller Low-Level 110-230VAC
TN9300-2101-0000-0000-10	DMR Tier 2 Conventional Channel Controller Mid-Level 110-230VAC
TN9300-2201-0000-0000-10	DMR Tier 2 Conventional Channel Controller Low-Level 110-230VAC
TN8271-00	TaitNet Network Gateway

SYSTEM TYPE	OEM SERVER
High-Level	Kontron CG2300
Mid-Level	Dell R230
Low-Level	Sintronex SBox2620

Licenses

ITEM CODE	DESCRIPTION
Licenses	
TNAS300	License DMR 3 Node Enabler without HA
TNAS302	License Tait Trunk DMR - High Availability (TNAS300/321 Prereq)
TNAS303	License Tait Trunk DMR - DIP 1 per call (TNAS300/320/321 Prereq)
TNAS304	License Tait Trk/Conv DMR - AIS 1 per call (TNAS300/310/320/321)
TNAS305	License Tait Trunk DMR - Data 1 per call
TNAS306	License Tait Trunk/Conv DMR - Voice Recorder
TNAS307	License Tait Trunk/Conv DMR - DES Encryption
TNAS308	License Tait Trunk DMR - OTAP
TNAS309	License Tait Trunk/Conv DMR - Telephony (SIP) 1 per call
TNAS310	License Tait Conv DMR - Conventional Node Enabler
TNAS311	License Tait Trunk DMR - Inter Network Connectivity
TNAS320	License DMR 3 Express6 Node Enabler
TNAS321	License DMR 3 Express20 Node Enabler
TNAS312	License Tait Trunk DMR - Simulcast
TNAS313	License Tait Trunk DMR - AES Encryption
TNAS314	License Tait Conv DMR - High Availability (TNAS310 Prereq)

Software maintenance and support is available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.



TaitNet Network Modules

Edition: 12



DMR (TN9300)

Network Licences	Description	Tier II	Tier III	Rules of Engagement
# TNAS300	DMR Trunking Node Licence		✓	One is required per Node. Licence to Enable up to 200 connections on the Network. (A connection is any logical voice Channel. Dispatches, PSTN, etc.)
# TNAS302	DMR High Availability Node Licence		✓	One is required per Node with High Availability. Enables High Availability on a system which already has another Main Node with a TNAS300 licence. Licence to Enable up to 200 connections on the Network. (A connection is any logical Channel. Dispatches, PSTN, etc.)
* TNAS303	DMR DIP Licence		✓	One per active call used for Partner Consoles with DIP integration. MAP27 Gateway Applies across the entire Network.
* TNAS304	DMR AIS Interface Licence	✓	✓	One per active simultaneous call used for AIS. Applies across the entire Network. (AIS connection are available on both Tier II & 3 platforms but SIP is only available on Tier II platform)
* TNAS305	DMR Packet Data Licence		✓	One is required per Node. (Enable Packet data specific application and is required for GridLink)
* TNAS306	DMR Voice Recorder Licence	✓	✓	One is required per Node. (Enable a maximum of x2 Media / Voice Recorders)
* TNAS307	DMR Single DES Encryption Licence	✓	✓	One is required per Node. (Enable clear communication to a Console from the Node)
* TNAS308	DMR OTAP Licence		✓	One is required per Node
* TNAS309	DMR Telephony SIP Licence	✓	✓	One per active simultaneous call used for Telephony - Applies across the entire Network. (AIS connection are available on both Tier II & 3 platforms but SIP is only available on Tier II platform)
# TNAS310	DMR Conventional Node Licence	✓	✓	One is required per Node
* TNAS311	DMR Inter DMR Network Connectivity Licence		✓	One is required per DMR System Trunked Node Controller connection
* TNAS312	DMR Simulcast		✓	One is required per DMR System Trunked Node Controller connection
* TNAS313	DMR AES Encryption		✓	One is required per DMR System Trunked Node Controller connection
* TNAS314	DMR High Availability Channel Controller	✓	✓	One is required per DMR Conventional System Channel Controller connection
# TNAS320	DMR Express6 Node Licence		✓	One Node DMR Express6 Enabler licence covers 1 to 6 Site System and has a maximum of 24 Repeaters across these 6 Sites. (48 Logical channels). Licence to Enable up to 200 connections on the Network. (A connection is any logical Channel. Dispatches, PSTN, etc.)
# TNAS321	DMR Express20 Node Licence		✓	One Node DMR Express20 Enabler licence covers 1 to 20 Site System and has a maximum of 120 Repeaters across these 20 Sites. (160 Logical channels). Licence to Enable up to 200 connections on the Network. (A connection is any logical Channel. Dispatches, PSTN, etc.)

Base Station Licences	Description	Tier II	Tier III	Rules of Engagement
TBAS300	DMR Trunking SFE Licence		✓	One Trunking SFE licence is required per Repeater for Tier III DMR Trunking operation. This one licence will cover two voice channels on a single Repeater.
TBAS301	Analog Air Interface SFE Licence		✓	One Analog SFE licence is required per Repeater to operate in Analog mode (Conventional or MPT). This SFE is included by default in all new products.
TBAS302	DMR Express6 Trunking SFE Licence (Used with TNAS320 only)		✓	One Trunking SFE licence is required per Repeater for Tier III DMR Express6 Trunking operation with a TNAS320 Node Express6 Enabler Licence. This one licence will cover two logical channels on a single Repeater on a 1-6 Site system only with a max of 24 Repeaters across 6 sites.
TBAS303	DMR Express20 Trunking SFE Licence		✓	One Trunking SFE licence is required per Repeater for Tier III DMR Express20 Trunking operation. This one licence will cover two logical channels on a single Repeater with a max of 4 Repeaters allowed on a single site DMR Express20 system.
TBAS304	DMR Conventional SFE Licence	✓	✓	One Conventional SFE licence is required per Repeater for Tier II DMR Conventional operation. This one licence will cover two voice channels on a single Repeater.
TBAS305	DMR Express20 Trunking SFE Licence (Used with TNAS321 only)		✓	One Trunking SFE licence is required per Repeater for Tier III DMR Express20 Trunking operation with a TNAS321 Node Express20 Enabler Licence. This one licence will cover two logical channels on a single Repeater on a 1-20 Site system only with a max of 120 Repeaters across 20 sites.
TBAS306	DMR Central Voter (Master) SFE Licence	✓	✓	One Central Voter SFE licence for the Master Base Station is required per Voted/Simulcast channel, plus another one recommended as a back-up Central Voter Master Base Station.
TBAS307	DMR IP Networking (Satellite) SFE Licence (Used in conjunction with TBAS306)	✓	✓	One IP network SFE Licence for each Satellite Base Station is required. A pre-requisite is that at least one Master Base Station is present for that channel.

Network Hardware	Description	Tier II	Tier III	Specification
TN9300-1001-0000-0000-10	DMR Trunked Node Controller High Level 110-230VAC		✓	Kontron CG2300 with Media kit CentOS 6.6 64-bit with DMR Tier II Trunked Node Controller Software
TN9300-1002-0000-0000-10	DMR Trunked Node Controller High Level 48VDC		✓	Kontron CG2300 with Media kit CentOS 6.6 64-bit with DMR Tier II Trunked Node Controller Software
TN9300-1101-0000-0000-10	DMR Trunked Node Controller Mid Level 110-230VAC		✓	Dell PowerEdge R230 AC with Media kit CentOS 6.6 64-bit with DMR Tier II Trunked Node Controller Software
TN9300-2101-0000-0000-10	DMR Conventional Node Controller Mid Level 110-230VAC	✓	✓	Dell PowerEdge R230 AC with Media kit CentOS 6.6 64-bit with DMR Tier II Conventional Node Controller Software
TN9300-1201-0000-0000-10	DMR Trunked Node Controller Low Level 110-230VAC		✓	Sintronics SBOK-2620 AC with Media kit CentOS 6.6 64-bit with DMR Tier II Trunked Node Controller Software
TN9300-2201-0000-0000-10	DMR Conventional Node Controller Low Level 110-230VAC	✓	✓	Sintronics SBOK-2620 AC with Media kit CentOS 6.6 64-bit with DMR Tier II Conventional Node Controller Software
TN8271-00	TaitNet Network Gateway	✓	✓	No Licence required.

If Multi-Node licence are required these operational licences can be duplicated on the Licence Form (Doc 4584) and then loaded onto all System Nodes as required.

* If you have purchased a High Availability licence (TNAS302 or TNAS314) and have installed that H/A licence, these other (*) licences if purchased and installed on the main Node controller or Channel Controller also need to be installed on the H/A Node controller or H/A Channel Controller.

All reasonable efforts have been made to ensure all information published on this document is as accurate and up-to-date as possible. The paper configurator is a guide only, and doesn't distinguish illegal configurations. Use the online configurator to ensure the configuration is correct before placing an order on DMR.

24 September 2018

Doc ID: 4703

TN9300

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

DMR Network Infrastructure - TN9300

TN9300 - Hardware

E/C	Item Code	Description	List Price
S	TN9300100200000000	Tier3 Trk Node Control Hi Level 48VDC	\$ 26,820.00
S	TN9300100100000000	Tier3 Trk Node Control Hi Lvl 110-230VAC	\$ 26,820.00
S	TN9300110100000000	Tier3 Trk Node Cntrl Mid 110-230VAC	\$ 7,267.00
S	TN9300210100000000	TierII Conv Node Cntrl Mid 110-230VAC	\$ 7,267.00
S	TN9300120100000000	Tier3 Trk Node Cntrl Low 110-230VAC	\$ 5,366.00
S	TN9300220100000000	Tier2 Conv Node Cntrl Low 110-230VAC	\$ 5,366.00
S	TN8271-00	TaitNet Network Gateway	\$ 2,545.00

TN9300 - Software Licenses

E/C	Item Code	Description	List Price
S	TNAS300	License DMR 3 Node Enabler without HA	\$ 25,636.00
S	TNAS302	License Tier3 Trk High Availability	\$ 12,818.00
S	TNAS303	License TaitNet DMR - DIP License	\$ 554.00
S	TNAS304	License Digital Dispatch /Teleco	\$ 1,628.00
S	TNAS305	License TaitNet DMR - Data	\$ 5,753.00
S	TNAS306	License TaitNet DMR - Voice Recorder	\$ 2,714.00
S	TNAS307	License TaitNet DMR - DES Enc	\$ 1,292.00
S	TNAS308	License TaitNet DMR - OTAP	\$ 829.00
S	TNAS309	License TaitNet DMR Telephony - (SIP) 1 P	\$ 1,628.00
S	TNAS310	License Tier2 Multisite Node Enabler	\$ 532.00
S	TNAS311	DMR Inter Network Connection	\$ 6,458.00
S	TNAS312	DMR Tier3 Simulcast	\$ 5,427.00
S	TNAS320	License DMR Tier3 Express6 Node Enabler	\$ 4,559.00
S	TNAS321	License DMR Tier3 Express20 Node Enabler	\$ 5,926.00
S	TNAS313	License, DMR Tier III, AES Encryption	\$ 1,937.00
S	TNAS314	License, DMR Tier II, CH Controller HA	\$ 2,714.00

Enable Suite



EnableProtect

Overview

Security is an important consideration for P25 networks, and security management and enforcement easier with three important tools: Key Management Facility, Key Fill Device, and Advanced System Key. Each of these tools can be used alone or together to provide complete security for radio configuration and communication.

EnableProtect Key Management Facility

Overview

Manage encryption across the fleet confidently and efficiently with the flexible and powerful EnableProtect Key Management Facility.

- ▶ The user-friendly EnableProtect Key Management Facility (KMF) brings the management of P25 encryption into one central location, making it easier to manage and update encryption keys across the user's organization. A complete set of diagnostics across all devices allows crypto officers to troubleshoot and resolve problems remotely, saving technician time if issues occur.
- ▶ The EnableProtect Key Management Facility (KMF) uses industry-standard cryptographic systems for Over-the-Air Reprogramming (OTAR). As part of an L3Harris-Tait conventional or trunked OTAR infrastructure solution, the efficient and easy-to-use KMF utilizes DES/AES security, which provides increased confidence in the system, and greatly reduces both RF traffic and user requests to rekey.

EnableProtect Key Fill Device

Overview

The EnableProtect Key Fill Device (KFD) makes encrypting digital radios as efficient and error-free as possible, ensuring that encryption specialists and radio technicians can manage their workflow with ease.

- ▶ L3Harris' comprehensive range of P25 radios, base stations/repeaters, and systems gives public safety organizations the ability to choose a solution that best meets their needs. Our versatile encryption options are designed to improve the safety and security of first responders.
- ▶ The KFD enables users to speed through repetitive rekeying tasks with easy-to-use commands, shortcuts for frequently used functions, and automatic connection to the radios.

EnableProtect Advanced System Key

Overview

EnableProtect Advanced System Key (ASK) utilizes specially configured USB Prime and Pass keys to safeguard P25 radio networks against unauthorized radio programming and use.

- ▶ Read/write protection stops unauthorized users from accessing or modifying the configuration data stored in radios. Users must have a USB pass key to program the radio.
- ▶ Trunking protection is usually required for large state-wide radio systems to prevent unauthorized use of a P25 trunking network. Users must have a USB pass key to program any P25 trunking-related settings.
- ▶ Provides two-factor authentication to complement the use of EnableFleet.

EnableProtect Key Management Facility (KMF)

Features

- ▶ Dashboard
 - A customizable dashboard allows users to track key update tasks, common key references, and groups and devices of interest.
- ▶ Diagnostics
 - The KMF has a comprehensive diagnostics tool that has been designed specifically to establish the state of devices on the network. Users can check to see if a device is on the system, verify the keys it has, update all the keys, as well as perform other diagnostic tests.
- ▶ Key Update Task
 - KMF messages are sent only to radios specified by the key update task, without needing to address the entire fleet. Key update tasks can be scheduled to occur at any time. This process is automated, so it is more secure and saves bandwidth.
- ▶ Problem Devices
 - This unique feature makes it easy to track devices that can be contacted but cannot be updated. The Problem Device indicator is highlighted if any changes occur to the list of problem devices.
- ▶ Redundancy
 - The KMF offers multiple levels of redundancy. This feature gives users real peace of mind because they are protected against hardware and power failures with virtually no downtime.
- ▶ Sectors
 - Devices can be assigned to sectors to make them easier to track. A sector can be a region or an agency.
- ▶ Unique Key Encryption Key (UKEK)
 - Most agencies use a common provisioning key (sometimes called a “shop key”) for the UKEK in all radios. The P25 EnableProtect KMF can automatically generate a truly unique UKEK for every radio. These can be exported to a KFD for use when commissioning new radios in the shop, or the KMF can replace the Common Provisioning Key with a unique UKEK the first time a radio operates on the network.
- ▶ Authorities
 - With the KMF, owners can be assigned to keys and groups, and their contact information is stored in the KMF. This helps crypto officers contact those responsible for the keys and groups if a problem arises.

EnableProtect Key Management Facility (KMF)

The KMF solution is available in both AC and DC variants.

ITEM CODE	DESCRIPTION
TN9121-0000-10	KMF Server Package AC PSU
TN9122-0000-10	KMF Standby Server Package AC PSU
TN9123-0000-10	KMF Server Package DC PSU
TN9124-0000-10	KMF Standby Server Package DC PSU

ITEM CODE	DESCRIPTION
TKAS101	KMF SFE Key - 1-150 Devices
TKAS102	KMF SFE Key - 151-1000 Devices
TKAS103	KMF SFE Key - 1001-4000 Devices
TKAS104	KMF SFE Key - 4001-10000 Devices
TKAS106	KMF SFE Key - KFD Interface

KMF server licenses are cumulative. For example, if the fleet has 3,000 devices that need keying, TKAS101, TKAS102, and TKAS103 would be needed.

ITEM CODE	DESCRIPTION
005-00590-00	Spare Encryption Smart Card

EnableProtect Key Fill Device (KFD)

The EnableProtect Key Fill device makes encrypting digital radios as efficient and error-free as possible, ensuring that encryption specialists and radio technicians can manage their workflow with ease.

Features of the KFD include

- ▶ Standard Key Fill
 - An easy-to-use key fill device, with simple screens and menus to make key inventory and management straightforward.
 - Automatic or manual generation of AES and DES keys, zeroes keys, and changes active keyset.
- ▶ Fast Key Fill
 - A fast activation package used to quickly load extremely secure keys into large numbers of radios.

ITEM CODE	DESCRIPTION
T03-00040-0004	KFD adaptor kit for Motorola XTS5000
T03-00040-0005	KFD adaptor kit for Motorola XTS5000 HHCH
TE1002DA000000AAAA	IP65 Device Yellow Standard Key Fill Support 1 year
ITEM CODE	DESCRIPTION
TPA-SV-020	TP/M9100 TP/M9400 TB9100 Encryption capable Motorola KVL Adaptor
T03-00059-AAAA	KFD to TIA Radio Adaptor
TE100200AA000000000	Anti-Reflective Screen Protector
TE100200AB000000000	Deluxe Carry Case
TE100200AC000000000	Vehicle Charging Kit
TE100200AD000000000	Stylus
TE100200AE000000000	Large Battery Pack
TE100200AG000000000	Replacement Juno Serial Cable
TE100200AF000000000	Micro SD card
005-20019-00	Juno Host Adaptor ¹
T03-22009-AAAA	TP9300 IS Programming Adaptor ¹
T03-22009-ADAA	TP9400 IS Programming Adaptor ¹
ITEM CODE	DESCRIPTION
TKAS030	Key Fill Device SFE – Fast Key Fill
TKAS032	Key Fill Device SFE – Standard Key Fill

¹ Required for wired connection from KFD to IS Portables.

Environmental

Fully Rugged Design tested to Military Standards – MIL-STD-810G and IP68
(Black with yellow)

Dimensions: 6.1 x 3.2 x 0.9 inches (15.5 x 8.2 x 2.5 cm)

Weight: 13.5 ounces (0.4kg)

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit.
(<http://www.openssl.org/>)

This product includes cryptographic software written by
Eric Young (eay@cryptsoft.com)



EnableProtect Advanced System Key

The EnableProtect Advanced System Key solution includes the following features:

- ▶ USB keys to guard against unauthorized programming
 - Prime key
A prime key is provided pre-configured with an expiration date. The only function of the prime key is to enable configuration of pass keys using the Pass Key Configuration Utility.
 - Pass key
A pass key, depending on its configuration, authorizes a user to program particular trunking system information and may also be used to control reading and programming of enabled radios.
- ▶ USB key expiration
 - Both prime keys and pass keys have a real-time clock and support a programmable expiration date (optional for prime keys, mandatory for pass keys) to force replacement of keys. Pass keys support a limit on the number of times they can be used to program radios. Prime and pass keys have an internal battery which requires the keys to be replaced every 4 years to ensure they are operational when required.
- ▶ Configuration Security
 - Read/write protection guards the radio asset. It protects against re-purposing a radio (for example, if stolen) and against misuse of a radio in an organization (for example, re-programming a radio with additional channel frequencies).
- ▶ Trunking protection
 - Trunking protection guards against a radio being programmed with trunking settings that would allow it to operate illegally on a trunked network.

The EnableProtect Advanced System Key is available as a starter kit which includes everything needed to begin use. Additional prime and pass keys can also be ordered. Note: Keys must be replaced every 4 years. Due to the secure nature of the Advanced System Key solution, there is a strict ordering process. Contact L3Harris representatives for assistance.

ITEM CODE	DESCRIPTION
TMAA23-03	EnableProtect Advanced System Key Starter Kit - x 1 Prime Key x3 Pass Keys
TMAA23-04	EnableProtect Advanced System Key Prime Key
TMAA23-05	EnableProtect Advanced System Key Pass Key

Software System Key (SSK)

For trunked networks where security is less of a concern, an SSK can be used to restrict radios being programmed to join the network.

L3Harris recommends that the EnableProtect Advanced System Key, not the SSK, be used in any network where security is a consideration. Due to the nature of the SSK, there is a strict ordering process. Contact L3Harris representatives for assistance.

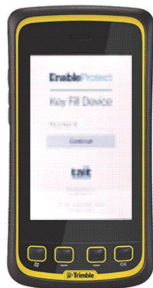
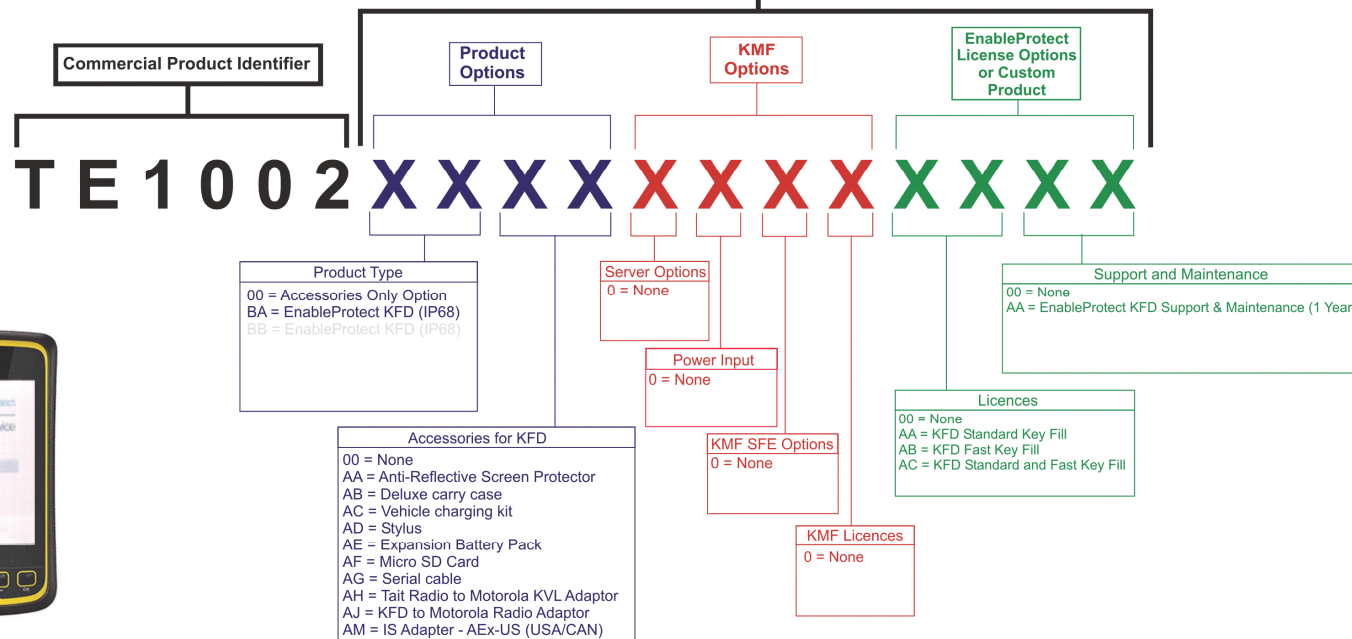
ITEM CODE	DESCRIPTION
TMAA23-10	System Key CD P25 Trunked



TE1002

Product Codes for Commercial Packages

Hardware / Operating System Options and EnableProtect License configurations for Network Management



18 August 2018

Doc ID: 6259

EnableMonitor

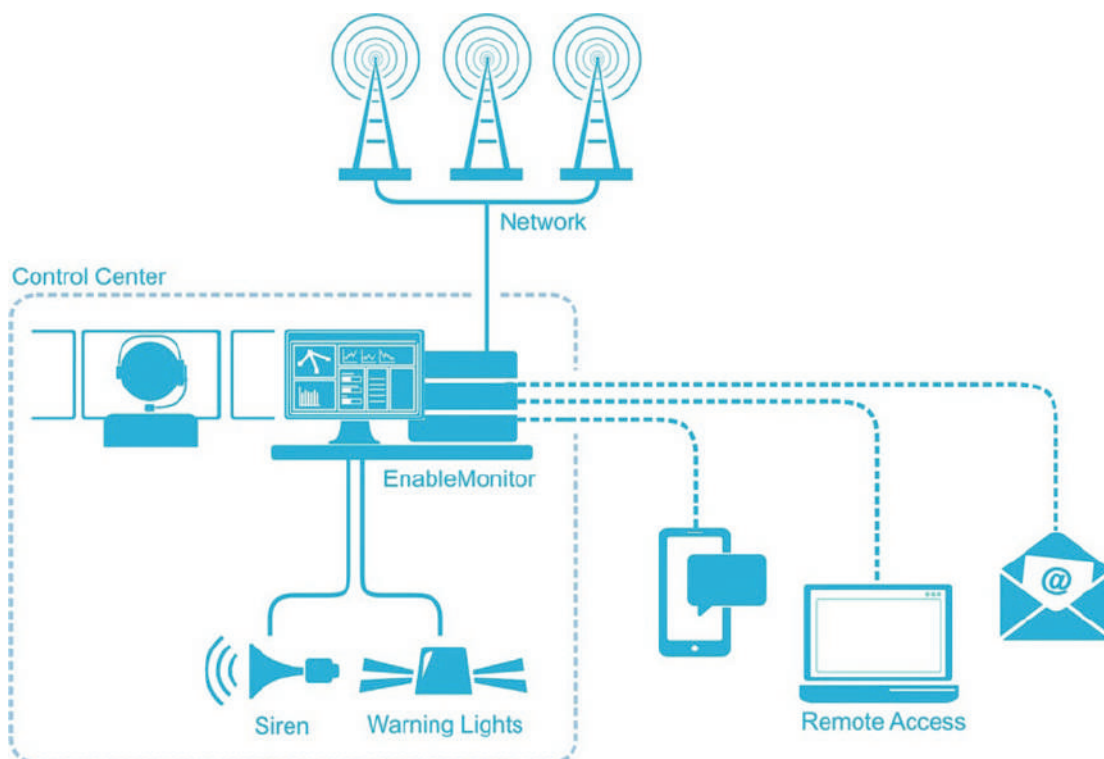
EnableMonitor

Overview

- ▶ Monitors the health of the L3Harris-Tait network.
- ▶ Helps users to anticipate and resolve issues before they threaten the communications that businesses depend on.
- ▶ As one part of the Enable Suite, EnableMonitor provides users all the tools needed to monitor the health of a radio network and reduce downtime.

KEY FEATURES

- ▶ Real-time system health status for early issue diagnosis
- ▶ Proof that the network is operating correctly
- ▶ Alerts and alarms when there is an issue
- ▶ Secure access to performance data anywhere, anytime
- ▶ Automatic discovery and configuration for easy setup
- ▶ Standards-based technology for interoperability
- ▶ Redundancy options for guaranteed performance
- ▶ Support for peace of mind



EnableReport

Overview

- ▶ Reports on the performance of the L3Harris-Tait DMR network.
- ▶ Allows users to generate and circulate vital network performance data to key decision makers, helping them to make informed business decisions in a timely manner.
- ▶ As one part of the Enable Suite, EnableReport provides detailed reporting options to help optimize network use, measure Key Performance Indicators (KPIs), and prove that the system is achieving the Service Level Agreements (SLAs).

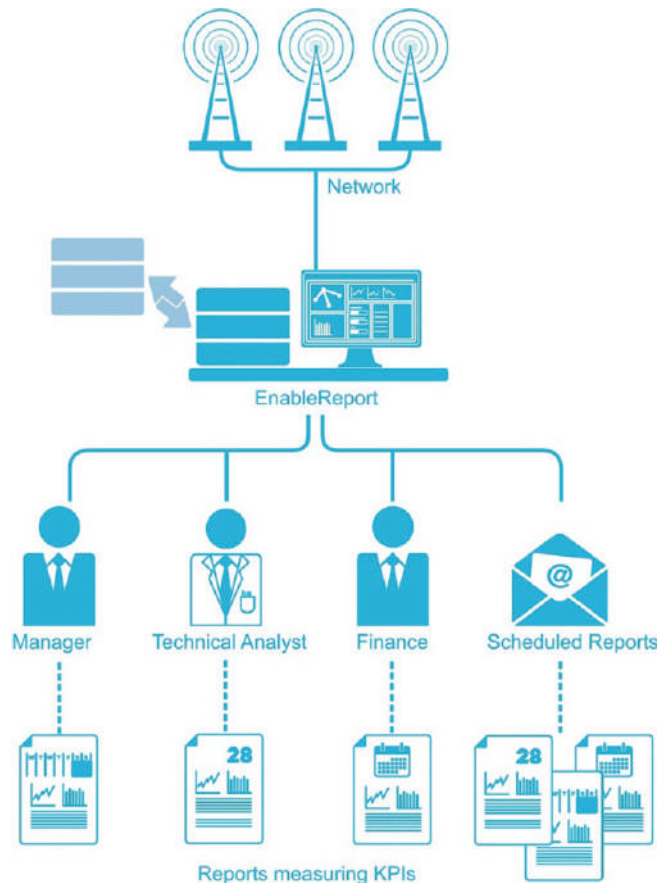
KEY FEATURES

- ▶ Provides detailed reports on the performance of the DMR network
- ▶ Clearly shows KPIs and proves that the system is meeting its SLAs
- ▶ Includes various reporting options for the different parts of the network over time
- ▶ Supports the specific reporting needs of various businesses

STANDARD REPORTS

- ▶ R1 – Weekly call statistics
- ▶ R2 – Weekly grade of service per site
- ▶ R3 – Monthly network loading
- ▶ R4 – Weekly talkgroup/fleet usage
- ▶ R5 – Daily volume per site
- ▶ R6 – Daily network loading
- ▶ R7 – Daily talkgroup/fleet call volumes
- ▶ R8 – Network Successful Traffic Calls
- ▶ R9 – Network Successful Emergency Calls
- ▶ R10 – Average On-Air Time by Call Type
- ▶ R11 – Network Call analysis
- ▶ R12 – Queuing per Site

EnableReport



Edition: 07
DMR

TE1000

Product Codes for Commercial Packages

Hardware / Operating System Options and Enable License configurations for DMR Network Management

Commercial Product Identifier

Hardware Options

Operating System

Enable License Options or Custom Product

TE 1 0 0 0 X X X X X X X X X X

Server Hardware Type

00 = None
02 = EnableMonitor Server - Essential - (110-240VAC Only)
03 = EnableMonitor Server - Central - (110-240VAC Only)
04 = EnableReport Server - RAID5 - DMR/MPT-IP
05 = EnableReport Server - RAID5 - P25

Power Input

0 = None
1 = 110-240VAC
2 = 48VDC

Probe Server Qty

00 = None
01 = x1 Probe Server
02 = x2 Probe Servers
03 = x3 Probe Servers
04 = x4 Probe Servers
05 = x5 Probe Servers
06 = x6 Probe Servers
07 = x7 Probe Servers
08 = x8 Probe Servers
09 = x9 Probe Servers
10 = x10 Probe Servers

Server Options

0 = None
*1 = Ontrack Adu 208 Relay and Mounting Kit
2 = Ontrack Adu 208 Relay and DIN Rail Kit

*Mounting Kit contains Standard Desktop, Flange and Velcro mounting kits.

Operating Systems

00 = None
01 = Microsoft Windows Server 2012 R2
02 = Centos (No Licence)

Support and Maintenance

AA = TEMM100 for TEMS100
AB = TEMM101 for TEMS101
AC = TEMM102 for TEMS102
AD = TEMM103 for TEMS103
AE = TEMM104 for TEMS104
AF = TERM100 for TERS100
AG = TERM101 for TERS101
AH = TERM100 & TERM101
AJ = TERM100 & (x2) TERM101

Enable License Options (Subject to Change in 2016)

00 = None
AA = TEMS100 License EnableMonitor 100 Devices (single server)
AB = TEMS101 License EnableMonitor 250 Devices (single server)
* AC = TEMS102 License EnableMonitor 500 Devices (distributed architecture)
* AD = TEMS103 License EnableMonitor 1000 Devices (distributed architecture)
* AE = TEMS104 License EnableMonitor 2500 Devices (distributed architecture)
** AF = TERS100 License EnableReport (5 Web Licenses)
** AG = TERS101 License EnableReport (10 Additional Web User pack)
** AH = TERS100 & TERS101
** AJ = TERS100 & (X2) TERS101 (Max allowed)


Example for EnableMonitor: TE100002010001AAAA

Commercial Product Identifier
TE1000 = Series Tait Enable

Hardware Options
02 = EnableMonitor Essential Server
0 = No Server Options
1 = 110-240VAC Power Supply
00 = No Probe Server Qty

Operating System Options
01 = Microsoft Server

Enable License Options or Custom Product
AA = License EnableMonitor 100 Devices (single server)
AA = EnableMonitor support and maintenance fee for TEMS100



Example for EnableReport: TE100003020002AFAF

Commercial Product Identifier
TE1000 = Series Tait Enable

Hardware Options
03 = EnableReport RAID5 Server
0 = No Server Options
2 = 48VDC Power Supply
00 = No Probe Server Qty

Operating System Options
02 = Centos- No Licence

Enable License Options
AF = License EnableReport (5 Web Licenses)
AF = EnableReport support and maintenance fee for TERS100

15 August 2018
Doc ID: 6246

EnableFleet

Overview

- ▶ Manages and configures radios from a central point of control.
- ▶ Provides accurate and reliable real-time fleet information, consistent installation results, and easy in-field programming for an entire fleet of mobile radios.
- ▶ As one part of the Enable Suite, EnableFleet allows users to manage the radio fleet with previously unachievable efficiency and certainty.

Key Features and Benefits

- ▶ Centralized radio configuration and firmware management
- ▶ Accurate and reliable fleet information
- ▶ Consistent installation results
- ▶ Cost-effective, easy in-field programming
- ▶ Easy delivery of updates using client application or Over-the-Air Programming (OTAP) for DMR, P25, and WiFi networks (WiFi-only available for Unified Vehicle-equipped mobiles)
- ▶ Automated client server updates and fleet status display
- ▶ File attachment support for installation auditing
- ▶ Optional additional protection for radio configuration (with EnableProtect ASK)
- ▶ Flexible server-side hosting options
- ▶ Scalable to suit small to large fleets

General

Delivery Options –

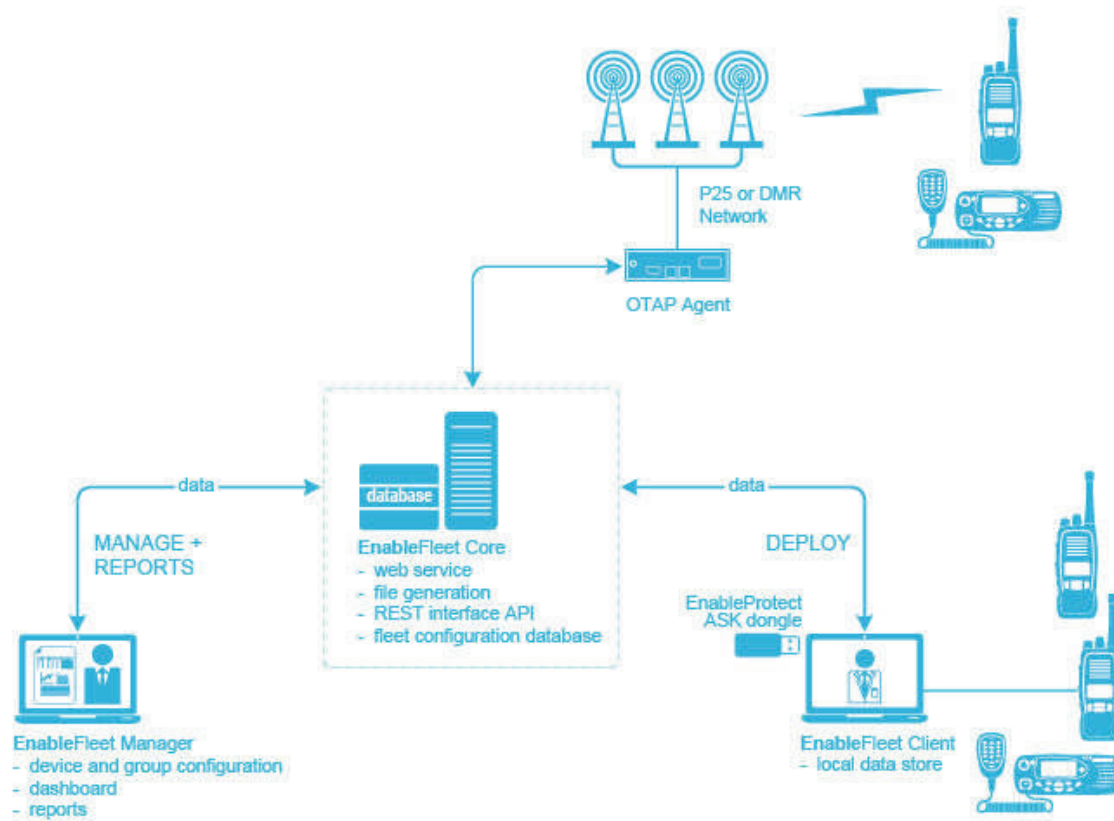
- ▶ Server Installation - Windows Server® 2016, SQL Server® 2014 on location with permanent licenses for terminals under management. See page 11.1-16 for ordering details.
- ▶ EnableFleet Manager - Recent versions of Internet Explorer®, Chrome®, and Firefox™
- ▶ EnableFleet Client – Any device with Windows® 7 or later
- ▶ Web Service – HTTPS
- ▶ Time Stamping – NTP synchronised
- ▶ Scalability: 100 to 15,000 terminals
- ▶ Recommended Options – EnableProtect Advanced System Key
- ▶ Logs – Audit Log, Error Log

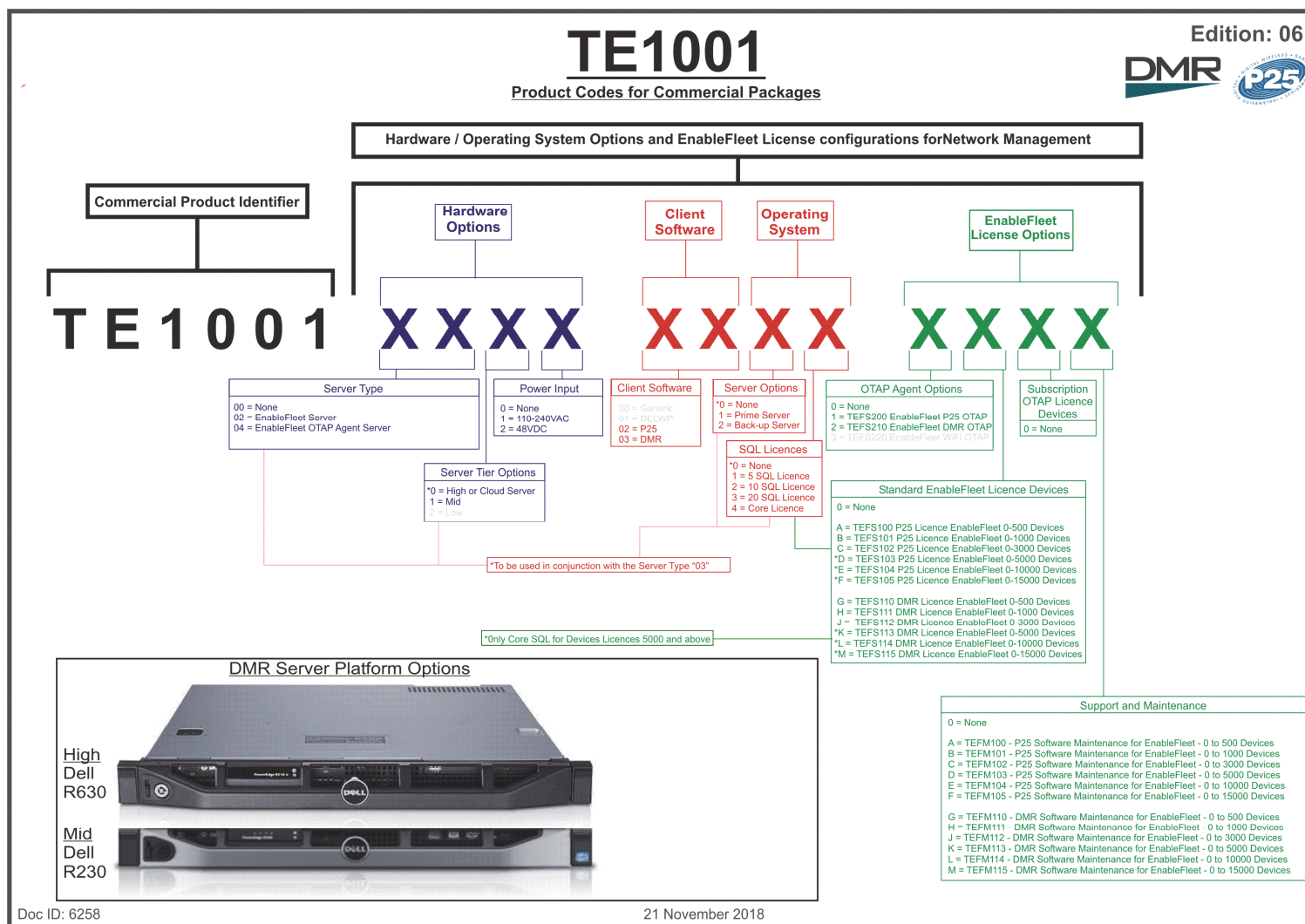
Supported Devices and Networks -

	Conventional Analog	MPT	DMR Tier 2 Conventional	DMR Tier 3 Trunked	P25 Conventional	P25 Trunked
EnableFleet	TM9300/TP9300 TM9400/TP9400	TM9300/TP9300	TM9300/TP9300	TM9300/TP9300	TM9400/TP9400	TM9400/TP9400
EnableFleet with OTAP				TM9300/TP9300		TM9400/TP9400
EnableFleet with WiFi OTAP	TM9300 with Unified Vehicle*	TM9300 with Unified Vehicle*	TM9300 with Unified Vehicle*	TM9300 with Unified Vehicle*	TM9400 with Unified Vehicle*	TM9400 with Unified Vehicle*

*Note: EnableFleet currently only provides updates for the base mobile. Future capabilities will provide capacity to update the software running on the Unified Vehicle platform.

EnableFleet





Doc ID: 6258

21 November 2018

EnableProtect

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

P25 Security - Key Management Facility (KMF)

KMF - Server

E/C	Item Code	Description	List Price
S	TN9121-0000-10	KMF Server Package AC PSU	\$ 87,281.00
S	TN9122-0000-10	KMF Standby Server Package AC PSU	\$ 69,367.00
S	TN9123-0000-10	KMF Server Package DC PSU	\$ 87,281.00
S	TN9124-0000-10	KMF Standby Server Package DC PSU	\$ 69,367.00

KMF - Server Licenses

E/C	Item Code	Description	List Price
S	TKAS101	SFE KMF 1-150 Subscriber Units	\$ 5,225.00
S	TKAS102	SFE KMF 151-1000 Subscriber Units	\$ 20,318.00
S	TKAS103	SFE KMF 1001-4000 Subscriber Units	\$ 44,604.00
S	TKAS104	SFE KMF 4001-10000 Subscriber Units	\$ 72,564.00
S	TKAS106	SFE KMF KFD Interface	\$ 6,931.00

EnableProtect: P25 Security - Key Fill Device (KFD)

Key Fill Device (KFD)

E/C	Item Code	Description	List Price
S	TE1002DA000000AAAA	KFD IP65 yellow std key fill - 1 year	\$ 6,241.00
S	TE1002BB000000AAAA	KFD IP68 grey std key fill - 1 year	\$ 8,820.00
S	TE1002DA000000ABAA	KFD Fast Key Fill - 1 year	\$ 5,726.00
S	TE1002BB000000ABAA	KFD IP68 grey fast key fill - 1 year	\$ 7,560.00
S	TE1002DA000000ACAA	KFD Standard & Fast Key Fill - 1 year	\$ 7,262.00
S	TE1002BB000000ACAA	KFD IP65 grey - std/fast key fill 1y	\$ 9,765.00

KFD - Accessories

E/C	Item Code	Description	List Price
S	TE100200AA00000000	Anti-Reflective Screen Protector	\$ 92.00
S	TE100200AB00000000	Deluxe carry case	\$ 175.00
S	TE100200AC00000000	Vehicle charging kit	\$ 212.00
S	TE100200AD00000000	Stylus	\$ 82.00
S	TE100200AE00000000	Large Battery pack	\$ 1,015.00
S	TE100200AG00000000	Juno Serial cable	\$ 258.00
S	TE100200AF00000000	Micro SD Card	\$ 29.00
S	TPA-SV-020	Adaptor for Motorola KVL & Tait Dev.	\$ 705.00
S	T03-00059-AAAA	Tait KFD to TIA Radio Adaptor	\$ 142.00

KFD - License

E/C	Item Code	Description	List Price
S	TKAS030	SFE KFD Fast Key Fill	\$ 1,022.00
S	TKAS032	SFE- KFD License Fast Key Fill	\$ 1,536.00
S	TKAS036	SFE KFD Fast Key Fill (TE1002)	\$ 768.00

EnableProtect: P25 Security - Tait Advanced System Key (TASK)

Please contact your L3Harris Customer Care Representative to complete Doc 4104 - Tait System Key Request Authorisation Form for each order

E/C	Item Code	Description	List Price
S	TMAA23-03	TASK Starter Kit - 1Prime Key 3Pass Keys	\$ 1,646.00
S	TMAA23-04	TASK Prime Key	\$ 838.00
S	TMAA23-05	TASK Pass Key	\$ 290.00

TASK - System Key

E/C	Item Code	Description	List Price
S	TMAA23-10	Syst Key CD P25 Trunked	\$ 32.00

EnableMonitor

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

EnableMonitor

EnableMonitor - Software with Server

E/C	Item Code	Description	List Price
S	TE100002010001AAAA	EnableMonitor SvrAC 100dev 1y	\$ 13,394.00
S	TE100002110001AAAA	EnableMonitor SvrAC Relay 100dev 1y	\$ 14,481.00
S	TE100002210001AAAA	EnableMonitor SvrAC RelayDIN 100dev 1y	\$ 14,481.00
S	TE100002010001ABAB	EnableMonitor SvrAC 250dev 1y	\$ 16,507.00
S	TE100002110001ABAB	EnableMonitor SvrAC Relay 250dev 1y	\$ 18,980.00
S	TE100002210001ABAB	EnableMonitor SvrAC RelayDIN 250dev 1y	\$ 18,980.00
S	TE100003010101ACAC	EnableMonitor SvrAC 1probe 500dev 1y	\$ 46,604.00
S	TE100003010201ACAC	EnableMonitor SvrAC 2probe 500dev 1y	\$ 51,078.00
S	TE100003010301ACAC	EnableMonitor SvrAC 3probe 500dev 1y	\$ 55,552.00
S	TE100003010101ADAD	EnableMonitor SvrAC 1probe 1000dev 1y	\$ 64,091.00
S	TE100003010201ADAD	EnableMonitor SvrAC 2probe 1000dev 1y	\$ 68,565.00
S	TE100003010301ADAD	EnableMonitor SvrAC 3probe 1000dev 1y	\$ 73,039.00
S	TE100003010101AEAE	EnableMonitor SvrAC 1probe 2500dev 1y	\$ 119,617.00
S	TE100003010201AEAE	EnableMonitor SvrAC 2probe 2500dev 1y	\$ 124,091.00
S	TE100003010301AEAE	EnableMonitor SvrAC 3probe 2500dev 1y	\$ 128,565.00

EnableMonitor - Support and Maintenance

E/C	Item Code	Description	List Price
S	TEMM100	EnableMonitor Sup. & Maint. 100dev 1y	\$ 1,629.00
S	TEMM101	EnableMonitor Sup. & Maint. 200dev 1y	\$ 2,146.00
S	TEMM102	EnableMonitor Sup. & Maint. 500dev 1y	\$ 6,493.00
S	TEMM103	EnableMonitor Sup. & Maint. 1000dev 1y	\$ 11,133.00
S	TEMM104	EnableMonitor Sup. & Maint. 2500dev 1y	\$ 23,101.00

EnableReport

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

EnableReport

EnableReport - Software with Server

E/C	Item Code	Description	List Price
S	TE100004010002AFAP	EnableReport DMR SrvAC 5 Licenses 1y	\$ 32,352.00
S	TE100004020002AFAP	EnableReport DMR SrvDC 5 Licenses 1y	\$ 32,952.00
S	TE100004010002AHAH	EnableReport DMR SrvAC 15 Licenses 1y	\$ 44,352.00
S	TE100004020002AHAH	EnableReport DMR SrvDC 15 Licenses 1y	\$ 44,952.00
S	TE100004010002AJAJ	EnableReport DMR SrvAC 25 Licenses 1y	\$ 56,352.00
S	TE100004020002AJAJ	EnableReport DMR SrvDC 25 Licenses 1y	\$ 56,952.00
S	TE100005010002AFAP	EnableReport P25 SrvAC 5 Licenses 1yr	\$ 32,352.00
S	TE100005020002AFAP	EnableReport P25 SrvDC 5 Licenses 1yr	\$ 32,952.00
S	TE100005010002AHAH	EnableReport P25 SrvAC 15 Licenses 1yr	\$ 44,352.00
S	TE100005020002AHAH	EnableReport P25 SrvDC 15 Licenses 1yr	\$ 44,952.00
S	TE100005010002AJAJ	EnableReport P25 SrvAC 25 Licenses 1yr	\$ 56,352.00
S	TE100005020002AJAJ	EnableReport P25 SrvDC 25 Licenses 1yr	\$ 56,952.00

EnableFleet

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

EnableFleet - P25

EnableFleet P25 On-Premise Server and MS Licenses

E/C	Item Code	Description	List Price
S	TE1001020102110A00	EnableFleet P25 500dev SvrAC	\$ 36,063.00
S	TE1001020102111A00	EnableFleet P25 OTAP 500dev SvrAC	\$ 41,764.00
S	TE1001020102120B00	EnableFleet P25 1000dev SvrAC	\$ 54,267.00
S	TE1001020102121B00	EnableFleet P25 OTAP 1000dev SvrAC	\$ 59,976.00
S	TE1001020102130C00	EnableFleet P25 3000dev SvrAC	\$ 113,495.00
S	TE1001020102131C00	EnableFleet P25 OTAP 3000dev SvrAC	\$ 119,196.00
S	TE1001020102140D00	EnableFleet P25 5000dev SvrAC	\$ 172,350.00
S	TE1001020102141D00	EnableFleet P25 OTAP 5000dev SvrAC	\$ 178,052.00

EnableFleet P25 On-Premise Support and Maintenance

E/C	Item Code	Description	List Price
S	TEFM100	EnableFleet P25 support & maint. 500dev	\$ 2,716.00
S	TEFM101	EnableFleet P25 support & maint. 1000dev	\$ 5,432.00
S	TEFM102	EnableFleet P25 support & maint. 3000dev	\$ 7,605.00
S	TEFM103	EnableFleet P25 support & maint. 5000dev	\$ 11,950.00

EnableFleet P25 - Hosted in the Cloud - Not available to federal customers that require government cloud security

E/C	Item Code	Description	List Price
S	TEFC120	EnableFleet, P25, Cloud, 100 Dev, 1 Yr, OTAP	\$ 800.00
S	TEFC130	EnableFleet, P25, Cloud, 100 Dev, 1 Yr	\$ 347.00

EnableFleet P25 Demo License

E/C	Item Code	Description	List Price
S	TEFC150	EnableFleet, P25 Cloud, Demo	\$ 34.00

EnableFleet P25 Terminal OTAP SFE

E/C	Item Code	Description	List Price
S	TMAS075	SFE - P25 OTAP	\$ 50.00
S	TPAS075	SFE - P25 OTAP	\$ 50.00

EnableFleet - DMR

EnableFleet DMR On-Premise Server and MS Licenses

E/C	Item Code	Description	List Price
S	TE1001020103110G00	EnableFleet DMR 500dev SvrAC	\$ 34,346.00
S	TE1001020103112G00	EnableFleet DMR OTAP 500dev SvrAC	\$ 39,778.00
S	TE1001020103120H00	EnableFleet DMR 1000dev SvrAC	\$ 51,683.00
S	TE1001020103122H00	EnableFleet DMR OTAP 1000dev SvrAC	\$ 57,115.00
S	TE1001020103130J00	EnableFleet DMR 3000dev SvrAC	\$ 108,090.00
S	TE1001020103132J00	EnableFleet DMR OTAP 3000dev SvrAC	\$ 113,522.00
S	TE1001020103140K00	EnableFleet DMR 5000dev SvrAC	\$ 164,143.00
S	TE1001020103142K00	EnableFleet DMR OTAP 5000dev SvrAC	\$ 169,575.00

EnableFleet DMR On-Premise Support and Maintenance

E/C	Item Code	Description	List Price
S	TEFM110	EnableFleet DMR support & maint. 500dev	\$ 2,716.00
S	TEFM111	EnableFleet DMR support & maint. 1000dev	\$ 5,432.00
S	TEFM112	EnableFleet DMR support & maint. 3000dev	\$ 7,605.00
S	TEFM113	EnableFleet DMR support & maint. 5000dev	\$ 11,950.00

EnableFleet DMR - Hosted in the Cloud - Not available to federal customers that require government cloud security

E/C	Item Code	Description	List Price
S	TEFC100	EnableFleet, DMR, Cloud, 100 Dev, 1 Yr, OTAP	\$ 800.00
S	TEFC110	EnableFleet, DMR, Cloud, 100 Dev, 1 Yr	\$ 347.00

EnableFleet DMR Demo License

E/C	Item Code	Description	List Price
S	TEFC140	EnableFleet, DMR, Cloud, Demo	\$ 34.00

EnableFleet DMR Terminal OTAP SFE

E/C	Item Code	Description	List Price
S	TMAS075-DMR	SFE Key - Mobile DMR Base OTAP Trunking	\$ 50.00
S	TPAS075-DMR	SFE Key - Portable DMR Base OTAP Trunking	\$ 50.00

EnableFleet DMR TN9300 Server OTAP Licence

E/C	Item Code	Description	List Price
S	TNAS308	License TaitNet DMR - OTAP	\$ 1,085.00

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GridLink – DMR SCADA



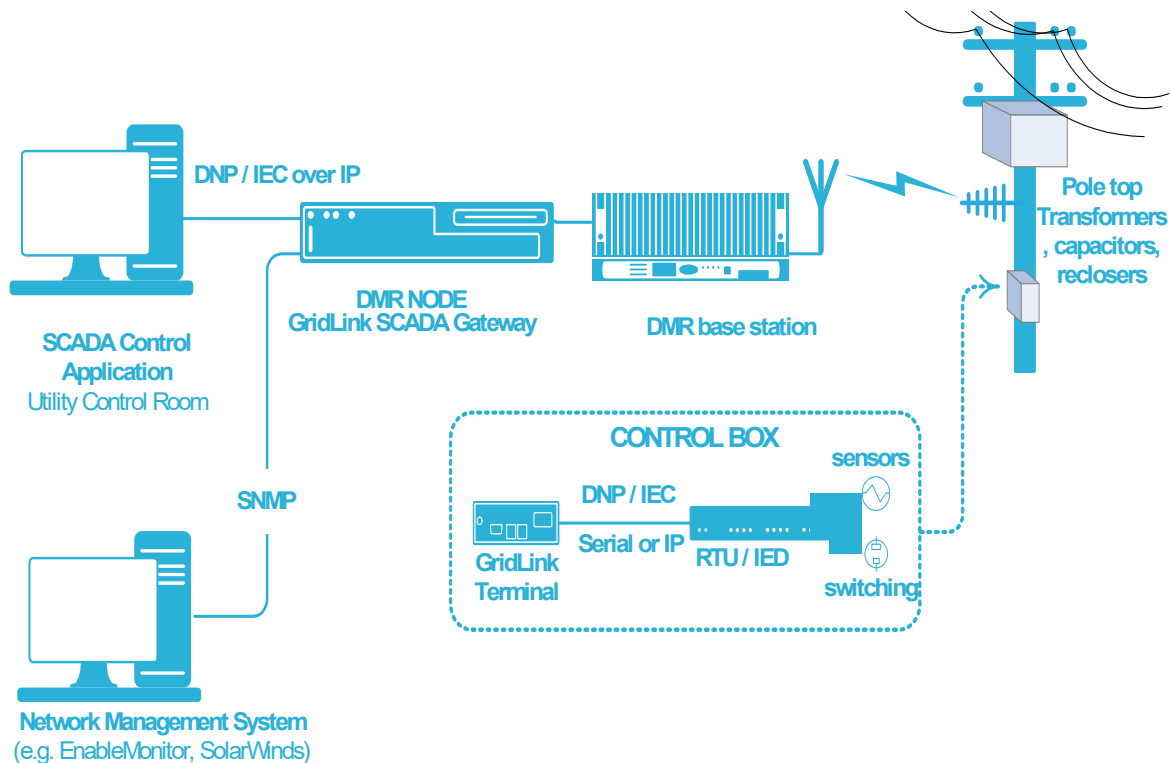
GRIDLINK OVERVIEW

The GridLink solution delivers wide-area SCADA transport services for a broad range of SCADA applications such as electrical distribution automation, water utilities, remote asset monitoring and management. GridLink enhances narrowband DMR Tier 3 network value proposition by enabling operational cost savings that result from a combined mission-critical voice and data network.

Many electric utilities are implementing field area networks in support of grid modernization, advanced metering infrastructure and distribution automation. Many rural and suburban areas are excluded from automation due to the high cost of scaling private broadband networks, including MESH. GridLink is ideal for rural and suburban pole top and pad mount switches, re-closers and capacitor banks.

The GridLink solution can deliver a broad range of utility use cases via a wide-area DMR radio network. The incremental cost to add GridLink to an existing mission-critical DMR voice network is far less than scaling MESH or private broadband to low density, low economic risk areas.

In a distribution automation system, GridLink provides secure, reliable wide-area transport of SCADA protocols such as IEC 60870-5, DNP3 or Modbus messages between a centralized management platform and field deployed remote telemetry units. These communication services can provide operational awareness to the hardest to reach locations and save time and money by providing remote access and diagnostics before field crews are deployed.



A DMR Tier 3-based Voice and SCADA solution offers the ideal platform to build your next wide area communication system business case around

To successfully deploy a GridLink system SCADA, ICT, Trunking and RF engineering considerations are essential. L3Harris can assist on all design, installation, commissioning and network management activities to ensure a successful outcome is achieved. For further information visit <https://premier.pspc.harris.com/infocenter/>.

The following sections provide essential product ordering information to be used when provisioning a GridLink system. Actual equipment required is dependent on specific system requirements, including any pre-existing equipment.

It is strongly recommended appropriate system engineering is performed to confirm system capacity and sizing, especially ensuring a stable and reliable TN9300 DMR T3 network as a pre-requisite for GridLink operation.

NETWORK EQUIPMENT

SCADA GATEWAY SERVER

The SCADA Gateway (SGW) has been designed and tested to be co-located on the same server used to provision the TN9300 DMR Trunked Node, or it can be provisioned on a separate server should system capacity or other network design considerations require.

The following SCADA Gateway deployment scenarios are possible:

1. Co-locate DMR Trunked node and SCADA Gateway on same server.
Co-location provides additional benefits for High Availability configurations.
2. SCADA Gateway on dedicated server.

Server package examples:

Server: DMR Trunked Node with SCADA Gateway – AC	
TN9300-3001-0000-0000-10	DMR Tier III Trunked Node with SCADA Gateway Hi Level AC
TN9300-3101-0000-0000-10	DMR Tier III Trunked Node with SCADA Gateway Mid-Level AC
TN9300-3201-0000-0000-10	DMR Tier III Trunked Node with SCADA Gateway Low Level AC
Server: DMR Trunked Node with SCADA Gateway – DC	
TN9300-3002-0000-0000-10	DMR Tier III Trunked Node with SCADA Gateway High Level 48VDC
Server: SCADA Gateway-only – AC	
TN9300-4001-0000-0000-10	DMR SCADA Gateway High Level AC
TN9300-4101-0000-0000-10	DMR SCADA Gateway Mid-Level AC
TN9300-4201-0000-0000-10	DMR SCADA Gateway Low Level AC
Server: SCADA Gateway-only – DC	
TN9300-4002-0000-0000-10	DMR SCADA Gateway High Level 48VDC

Notes:

- Server sales packages come pre-installed; system-specific configuration and licensing are still required.
- GridLink is released on and supports the following server platforms: High level, Mid-level and Low level.
- It is strongly recommended guidance on capacity requirements is obtained from L3Harris when selecting Low-Level servers.

Software-only installation packages:

Software-only Installation – Node and SCADA Gateway	
TN9320-3300-0000-0000-10	DMR Tier 3 Trunked Node Controller + SCADA G/way S/W for Solaris10OS
TN9321-3300-0000-0000-10	DMR Tier 3 Trunked Node Controller + SCADA G/way S/W for CentOS

Software-only Installation – SCADA Gateway only	
TN9321-4300-0000-0000-10	DMR SCADA Gateway Software for Solaris10 OS
TN9320-4300-0000-0000-10	DMR SCADA Gateway Software for Centos6 OS

Notes:

1. Contact L3Harris Technical Support for access to software packages.
2. For first-time installations, an operational server running listed Solaris® or CentOS™ OS is required.
3. Software installers can manage different target OS, i.e.:
 - a. For Solaris, a Virtual Machine (VM) based package is installed, or
 - b. For Centos, a native installation that does use a VM is installed (recommended deployment)
4. Server type, OS and application version compatibility should be considered; additional information can be obtained from following sources:
 - a. DMR Node installation manual for OS guidelines (MNB-00001-xx)
 - b. SCADA Gateway Installation and Configuration Manual (MNE-00020-xx)
 - c. L3Harris Technical Support

SCADA GATEWAY DATA TERMINAL ENABLEMENT

Select the SGW license enabler to meet your system sizing needs

Network SCADA Licences	
TNAS357	License TaitNet DMR - SCADA Gateway Data Terminal Licenses 100
TNAS358	License TaitNet DMR - SCADA Gateway Data Terminal Licenses 200
TNAS359	License TaitNet DMR - SCADA Gateway Data Terminal Licenses 300
TNAS360	License TaitNet DMR - SCADA Gateway Data Terminal Licenses 500
TNAS362	License TaitNet DMR - SCADA Gateway Data Terminal Licenses 10000

Notes:

- Combinations can be ordered. e.g. TNAS360 + TNAS358 (enables 700 terminals), or qty 2 TNAS358 (enables 400 terminals).
- A license request form will need to be completed.

SCADA GATEWAY ENCRYPTION AND HIGH AVAILABILITY

Commencing from SCADA Gateway release v1.12.01 (April 2018) and later, the following SFE or licenses are enabled in the factory when built or are now supported as standard features not requiring license enablement.

1. SCADA Gateway AES 256-bit Encryption (TNAS365)
2. SCADA Gateway high availability (TNAS367)

TNAS368 (installed on the DMR node) provides license price breaks for DMR node data operation. It delivers bundled TNAS303 and TNAS305 licenses. TNAS368 should **only** be purchased for use with GridLink.

Notes:

- GridLink provides end-to-end encryption between the SCADA gateway and TD9300 data terminal for SCADA messaging. This capability is independent and transparent to DMR network level encryption services.
- Key management is provided by a SCADA Gateway web configuration page.
- Server hardware and DMR node license provisioning for high availability will require appropriate consideration.

For SCADA gateway deployments prior to v1.12.01, the following licensing will need to be provisioned:

Network SCADA Licences	
TNAS365	License TaitNet DMR - SCADA AES 256 Encryption
TNAS367	License TaitNet DMR - SCADA High Availability <i>(Not Available on Express Node)</i>
TNAS368	License TaitNet DMR - SCADA License 1 per call

TN9300 TRUNKED DMR NETWORK ENABLEMENT

As part of any wider DMR network system design, the following DMR TN9300 network licenses should be considered during GridLink solution planning:

Network DMR Node Licences	
TNAS300	Licence DMR 3 Node Enabler without HA
TNAS320	License DMR 3 Express6 Node Enabler
TNAS302	Licence TaitNet DMR - High Availability Node Licence
TNAS303	Licence TaitNet DMR - DIP License
TNAS305	Licence TaitNet DMR – Data

Notes:


- DIP and Data licenses are mandatory and require system capacity engineering to define quantity.
- TNAS307 (DES encryption) is not applicable to the GridLink solution.
- TNAS303 and TNAS305 are not needed if TNAS368 is being used for SCADA data.

DMR base stations require the appropriate DMR trunking enablement SFE.

Base Station Licences	
TBAS300	SFE Key - DMR Trunking SFE Licence with TDMA operation (93)
TBAS302	SFE Key - DMR Express SFE Licence with TDMA operation (93)

Note: The GridLink solution does not operate on or support the L3Harris DMR Access operational mode.


Software maintenance and support are available on an annual renewal basis. Software maintenance ensures your software investment remains fully operational, high performing and current through updates that also include valuable new features – please contact your L3Harris Representative for further details.



TN9300 DMR

Product Codes for Commercial Packages

Edition: 11



Hardware / Software / Ancillary Options and Licence configuration

Commercial Product Identifier

TN93XX

Product Type

00 = DMR Server Install (HW + SW)
20 = Software Install - Solaris
21 = Software Install - Centos

Hardware / Software Options

XXXX

Power Input

0 = None
1 = 110-240VAC
2 = 48VDC
3 = 12VDC

Future Options

0 = None

Ancillary Options

XXXXX

Ancillary Options

0000-0 = None

Hardware/Software Encryption Options

X

Encryption Options

0 = None
1 = AES Enabled Encryption

Hardware Platform Licence Options

XXX

Node Licence Options

00 = None
AA = TNAS300 DMR Trunking Node without High Availability
AB = TNAS301 DMR Trunking Node with High Availability
AC = TNAS320 DMR Trunking Express6
AE = TNAS310 DMR Conventional Node
AF = TNAS321 DMR Trunking Express20

Point of Package Assembly or Custom Product

10

Product Type

1 = DMR Trunked - Node (Tier 3 Full or Express)
2 = DMR Conventional - Node (Tier 2)
3 = DMR Trunked + SCADA Gateway - Node + SCADA (Tier3)
4 = DMR SCADA Gateway - SCADA (Tier3)

Server Hardware Options	Tier3 Full	Tier3 Express20	Tier3 Express6	Tier2	Tier3 Full or Express6/20 + SCADA	Tier3 SCADA
0 = High Level - Kontron CG2300 Server	Yes	Yes	Yes	No	Yes	Yes
1 = Mid Level - Dell R230 Server	¹ Yes	¹ Yes	Yes	Yes	Yes	Yes
2 = Low Level - SBOX-2620 Server	No	No	Yes	Yes	On Request	On Request
3 = Software Only Install	² Tait Service	² Tait Service	² Tait Service	No	^{2,3} Tait Service	^{2,3} Tait Service
4 = High Level - Dell R630 Server	Yes	Yes	Yes	No	Yes	Yes

Network Packaging Number example

TN9300-1101-0000-00AC-10 DMR Tier III Express6 Node Controller Mid Level 110-230VAC

Contains:

TNAS320	License TaitNet DMR - DMR Express6	x1
005-00207-00	SERVER Dell PowerEdge R230	x1
219-01002-00	CBL cord 2m Eur IEC	x1
219-01561-00	CBL cord 2m USA IEC blk	x1
219-01000-00	CBL cord 2.5m ANZ IEC	x1

DMR Server Platform Options

High Level
Kontron

Mid Level
Dell

Low Level
SBOX-2620

¹ Recommended to be ordered as a H/A (High Availability) configuration
² To be installed by Tait on a Valid Server configuration
³ For install on existing Node

09 April 2018

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TD9300 DATA TERMINAL

Overview

- VHF and UHF (136-174MHz, 400-470MHz). Other bands on request.
- Standards-based SCADA protocols:
 - IEC 60870-5-101, IEC 60870-5-104, DNP3, ModBus TCP/serial
- 9 - 36 volt DC input
- Digital in/out: 2 in, 2 out
- Extensive performance reporting
- Serial and Ethernet interfaces
- Data Encryption: AES 256 bit
- Remote monitoring SNMP V2.0c traps
- Protection: IP40 in all orientations, IP41 in one orientation
- Operating temperature: -30°C to 60°C






Standards

- EN300-086, -113, -219,
EN301-489, EN60950
- CRF47
- RSS-119
- AS/NZS4295

For further details refer to MNE-00003-xx, TD9300 Data Terminal Installation and Configuration Manual.

TD9300 Models and RF Band Availability

The TD9300 data terminal is available in several models and RF bands as per the table below:

TD9300 models and RF Band Availability			
Model	TD9355-xx00 (non-isolated)	TD9355-xx0A (isolated v1)	TD9355-xx0C (isolated v2)
Description	Signal ports and DC input not isolated	Signal ports only isolated	Signal ports and DC input isolated
			
RF output power (max)	25W	5W	25W
RF bands	B1 (136-174MHz) H5 (400-470MHz)	B1 (136-174MHz) H5 (400-470MHz)	B1 (136-174MHz)
Notes		<ul style="list-style-type: none"> • Customer specific • Not for new deployments 	

DATA TERMINAL – SALES PACKAGE

Includes:

- SCADA Data Terminal - x1
- Screw Terminal DC Power Connector 2 way - x1
- Screw Terminal Digital I/O Connector 4 way - x2
- Mounting Screws Black M4x12 - x4
- Note: No cables are provided as Standard with Data Terminal packages

DATA TERMINAL – LICENSE ENABLEMENT

Commencing from TD9300 data terminal release v1.12.01 and later, the following license is no longer required as it is now provided as standard capability:

1. TDTS100 SFE Key - SCADA AES 256 Encryption

For all TD9300 data terminal releases prior to v1.12.01 if 256-bit AES encryption is required, the TDTS100 license will need to be obtained and installed.

Note: Key management is provided by a TD9300 web configuration page.

DATA TERMINAL – TM9300 MOBILE LICENSES

The TD9300 Data Terminal includes a TM9300 sub-assembly that provides the DMR Tier 3 Common Air Interface (CAI) radio modem. Commencing from June 2018, the following SFE is no longer required as it is now provided as standard capability:

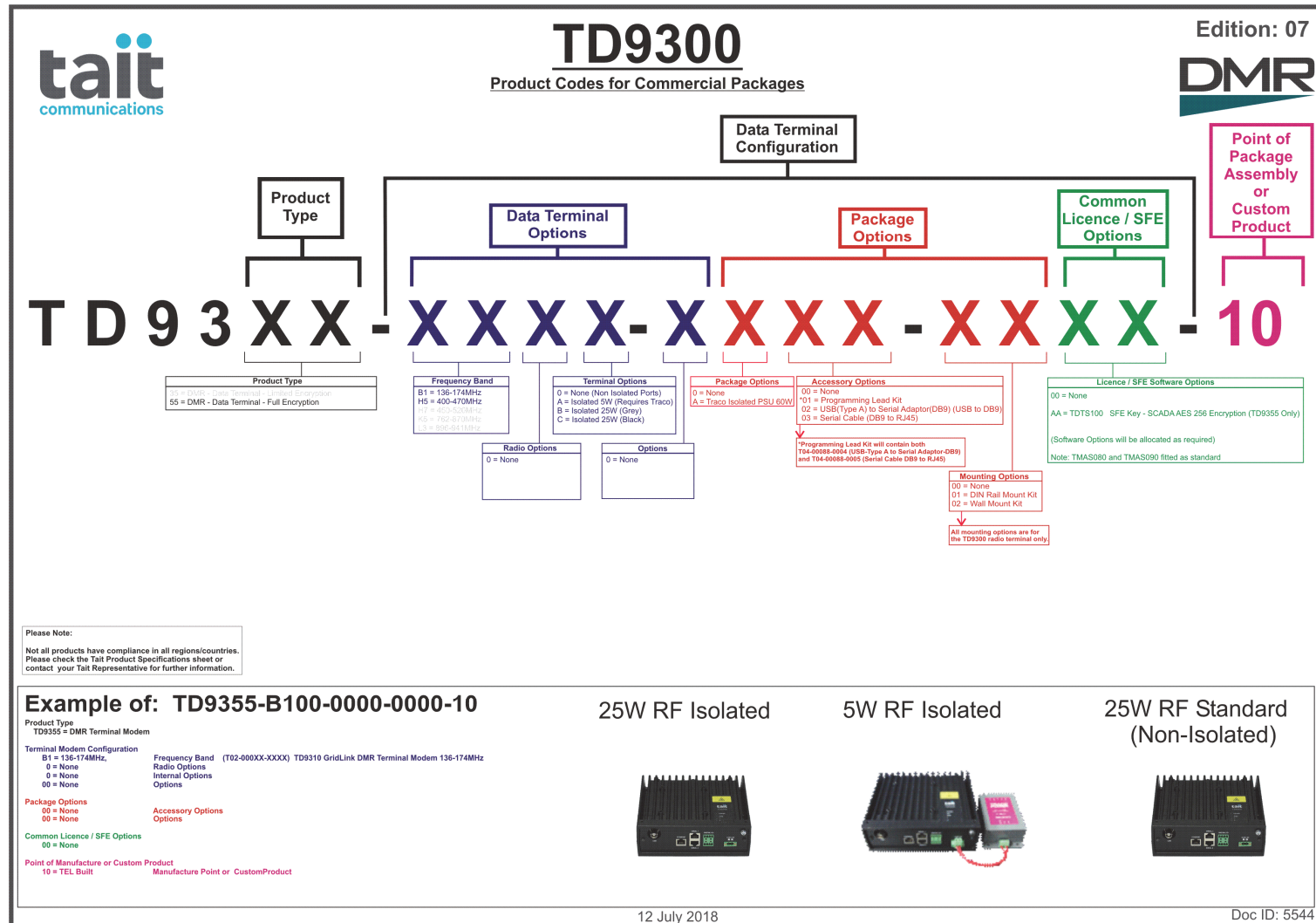
Factory-fitted TM9300 Terminal Licences	
TMAS075-DMR	SFE Key - OTAP

Note: If TM9300 OTAP capability is required, the following considerations are also needed:

- a. EnableFleet server, application and licensing.
- b. Configuration of TM9300 OTAP/data settings
- c. EnableFleet database pre-deployment registration

The following additional TM9300 licenses could be considered at order time depending on specific system requirements.

TM9300 Terminal Licences	
TMAS104	SFE Key - Extended Hunt List Capacity (93)



DATA TERMINAL – ACCESSORIES

Data Terminal Mounting Kits	
T04-00088-0000	TD9000 DIN Rail Mount kit
T04-00088-0001	TD9000 Wall Mount Kit
Data Terminal Radio Programming and Serial RTU Interconnection	
T04-00088-0004	TD9000 USB to Serial Adaptor
T04-00088-0005	TD9000 Serial Cable DB9 to RJ45
Data Terminal Ancillary Items	
219-03282-00	TD9000 Ethernet Cable .5M Assembly
219-03288-00	TD9000 Ethernet Cable .75M Assembly
219-03283-00	TD9000 Ethernet Cable 1M Assembly
219-03284-00	TD9000 Ethernet Cable 1.5M Assembly
219-03285-00	TD9000 Ethernet Cable 2M Assembly
219-03286-00	TD9000 Ethernet Cable 3M Assembly

Note:

- For radio programming, a USB-to-serial and TD9000 DB9-to RJ45 cable is required.
- The TD9300 serial interfaces are NOT compatible with TM9300 USB-to-RJ11 cable, TPK-SV-009.



T04-00088-0005 TD9300 Serial Cable DB9 to RJ45



T04-00088-0004 TD9300 USB-to-Serial Adaptor

Acronym Descriptions

AES	-	Advanced Encryption Standard
AIS	-	Automatic Identification System
CAI	-	Common Air Interface
DSCADA	-	Distribution Supervisory Control and Data Acquisition
DES	-	Data Encryption Standard
DIP	-	Dispatcher Inference Protocol
DMR	-	Digital Mobile Radio
DNP3	-	Distributed Network Protocol
IEC	-	International Electrotechnical Commission
IP	-	Internet Protocol
MIB	-	Management Information Base
OTAP	-	Over-the-Air Programming
RTU	-	Remote Terminal Unit
SCADA	-	Supervisory Control and Data Acquisition
SFE	-	Software Feature Enabler
SGW	-	SCADA Gateway
SIP	-	Session Initiation Protocol
SNMP	-	Simple Network Management Protocol
TDMA	-	Time Division Multiple Access
USB	-	Universal Serial Bus

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

GridLink

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E/C	Item Code	Description	List Price
S	TN9300320100000000	Server, TN9300, DMR, SCADA, Low Level, AC	\$ 5,210.00
S	TN9300310100000000	Server, TN9300, DMR, SCADA, Mid-Level, AC	\$ 7,055.00
S	TN9320330000000000	Server, TN9300, DMR, Cntrlr SCADA, Solaris10	\$ 2,328.00
S	TN9321330000000000	Server, TN9300, DMR, Cntrlr SCADA, Centos	\$ 2,328.00
S	TN9300300100000000	Tier3 SCADA Control Hi Lvl 110-230VAC	\$ 26,039.00

TD9300 - SCADA Gateway Licenses

E/C	Item Code	Description	List Price
S	TNAS357	License, SCADA Gtway Data Terminal x100	\$ 4,048.00
S	TNAS358	License, SCADA Gtway Data Terminal x200	\$ 7,691.00
S	TNAS359	License, SCADA Gtway Data Terminal x300	\$ 11,132.00
S	TNAS360	License TaitNet DMR - SCADA Gateway 500	\$ 15,500.00

TD9300 - DMR Data Terminal

E/C	Item Code	Description	List Price
S	TD9355B10000000000	Full Crypto 25W 136-174MHz	\$ 1,395.00
S	TD9355H50000000000	Full Crypto 25W 400-470MHz	\$ 1,395.00

TD9300 - Data Terminal Accessories

E/C	Item Code	Description	List Price
S	T04-00088-0000	TD9000 Basic DIN Rail Bracket Kit	\$ 55.00
S	T04-00088-0001	TD9000 Wall Mount Kit	\$ 20.00
S	T04-00088-0004	TD9000 USB to Serial Adaptor	\$ 71.00
S	T04-00088-0005	TD9000 Serial Cable DB9 to RJ45	\$ 32.00

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Unified Vehicle



Unified Vehicle

OVERVIEW

Unified Vehicle is a multi-bearer communications hub, offering a high level of connectivity, with access to LMR, cellular, and WiFi®. This flexible communications solution can maximize customer's workforce productivity and safety today and will allow the evolution of customer solutions for the organization's needs.

This single integrated device combines connectivity, application processing, storage, and communications in a powerful, easy-to-use open standards platform. Unified Vehicle is made to evolve and protect the customer's investment with the ability to deliver a range of voice and data solutions for current and future needs of users and operators.

Unified Vehicle utilizes a vehicle area network that travels with the user, includes analog and digital radio, WiFi and wired Ethernet, cellular (LTE), and – in the future – satellite. This multi-bearer connectivity ensures urgent communications, voice or data, always get through. The AppBuilder platform allows information collection and decisions to be made based on a wider network of sensors, monitoring equipment, and devices.

RESIDENT APPLICATIONS

SYSTEM FUNCTIONALITIES

- ▶ Unified Vehicle Remote application supporting voice calls between Android™ devices and LMR. The tested hardware and operating system is the Sonim XP7® (Android 5.1.1). Compatibility with other devices is likely possible, however, they are yet to be qualified.
- ▶ WiFi Over-the-Air-Programming (OTAP) of the mobile radio configuration and firmware updates (requires EnableFleet OTAP application).
- ▶ On-Board Voice Recording.
- ▶ AppBuilder.
- ▶ Multi-bearer connections – LMR, 2.4GHz/5GHz WiFi, and cellular connectivity.
- ▶ External WiFi antenna options (must be specified when ordering)

LMR COMPATIBILITY

	Remote Application	WiFi OTAP	Voice Recording	AppBuilder
DMR Trunked Tier 3	✓	✓	✓	✓
DMR Conventional Tier 2	✓	✓	✓	✓
MPT	✗	✓	✓	✓
P25 Trunked	✓	✓	✓	✓
P25 Conventional	✓	✓	✓	✓
Analog Conventional	✗	✓	Future	✓

COVERAGE

WiFi connectivity in a moving environment, such as Unified Vehicle, is variable dependent on several factors including the installation position, surrounding obstacles, smartphone type, etc.

WIFI OTAP

With access to the customer WiFi network, Unified Vehicle-equipped mobiles (P25/DMR trunked and conventional) can be reprogrammed using the EnableFleet server connected to a suitable OTAP Agent. This reduces the load on the LMR network and improves the speed and ease of updating the entire fleet. This can be very useful when migrating from Analog/MPT to digital networks.

ON-BOARD VOICE RECORDING

The on-board voice recording application will record all audio transactions, both transmit and receive (excludes analog LMR). The voice recordings can be accessed via the Unified Vehicle web interface (a web portal). If a time source is available, the files will be time-stamped; if a time source is not available, the files will be recorded in chronological order. Over 100 hours of radio traffic recordings can be saved on a 16GB SD card. Once the card reaches capacity, it will start overwriting the older files. A 16GB SD card is fitted as standard (up to 64GB can be fitted as a custom option).

UNIFIED VEHICLE REMOTE APPLICATION

The Unified Vehicle Remote Application allows an Android smartphone to remotely control the mobile unit, permitting group LMR calls to be received and transmitted and individual calls to be received on Android smartphones (Sonim smartphones are recommended). Emergency calls can also be activated from the smartphone. The application is available on the Google Play™ store.

The Unified Vehicle Remote Application does not provide full control of the radio and cannot be used as a remote head. The radio is programmed to support a Work Group UI.



Figure 1: Unified Vehicle Remote Application User Interface

UNIFIED VEHICLE REMOTE APPLICATION USE CASE

Using the Remote Application, lone workers with an Android smartphone can connect to their vehicle radio via WiFi, which allows them to monitor and join conversations when away from the vehicle. They can now work outside the vehicle without risk of missing vital communications.

If a problem occurs, the worker can make an emergency call to the dispatch center over the radio network, with options to allow emergency voice cycling to take place. This hands-free, time-based capability aids communication when the worker is incapacitated.



Figure 2: Android device communicates with radio network users via Unified Vehicle



Figure 3: The ability to make an emergency call away from the vehicle can significantly improve the response times for medical attention

UNIFIED VEHICLE APPBUILDER

Unified Vehicle supports an application builder which is a purpose-designed tool for channel partners, integrators, and customers to easily program and control various aspects of their communications and in-vehicle connectivity. This makes programming outcomes such as alerts on various devices connected to the user's communication system easy and quick to achieve.

This application-building tool allows users to identify, define, and make decisions based on a range of events and inputs. These inputs could be from laptops, street signs, portable radios, vehicles, elevators, electric doors and windows, environmental sensors, on-board vehicle diagnostics, Bluetooth® tags, websites, alarms, etc.

A demo version is available free on all Unified Vehicle units. The demo version allows access to the full AppBuilder functionality; however, communication is terminated after 90 minutes. All programs built are saved and available again after a simple reset. This is ideal for testing, training, and even customer demos. A license is required to upgrade to the commercial version for all units running the applications.

Applications can be created using one of two intuitive AppBuilder interfaces. The behavior-based interface allows users to quickly create applications using dropdown boxes. The flexible node-based interface allows users to quickly create complex applications using a drag-and-drop system.

BEHAVIORS INTERFACE

The behavior-based version of AppBuilder is the simplest way to create custom solutions. Each solution is created based on a series of four dropdown menus. A simple example is shown below in which the following rule is implemented: if a GPIO input changes, display a notification on the LMR radio screen.

Rules/behaviour application

Source	Event	→	Destination	Action		
Click to enter description Tait Unified Platform	GPIO Input changed	▼	Tait Unified Platform	Display a notification	⚙️	✖️
				+ Add new rule ✖️ Remove rule group		

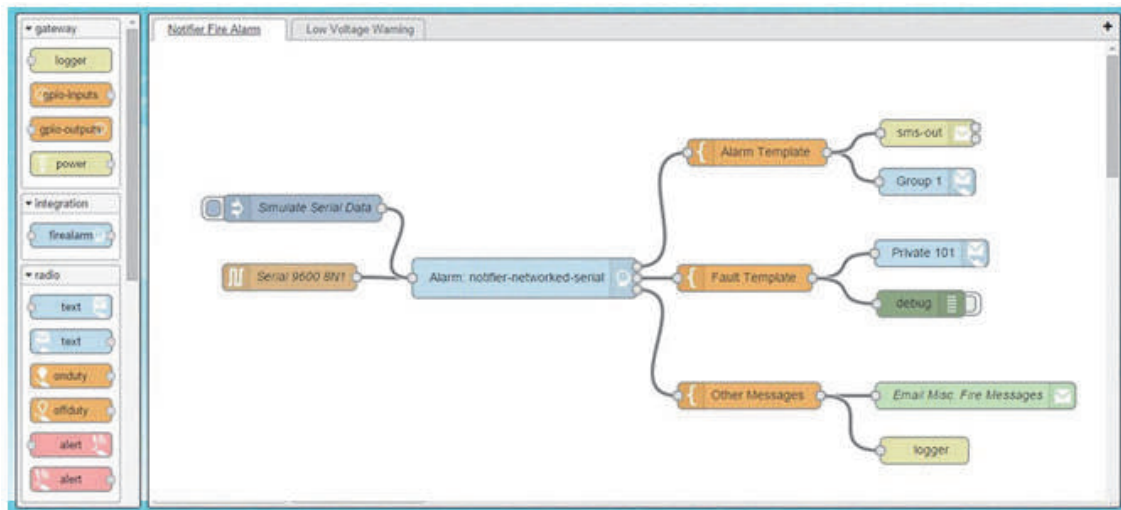
The tool, however, is capable of additional behavior solutions. The diagram below illustrates an example where multiple simple rules are used to create a more powerful program.

Source	Event	→	Destination	Action		
Click to enter description Interval timer	Event fired when timer 'ticks'	▼	Tait Unified Platform	Control GPIO pin	⚙️	✖️
Click to enter description Tait Unified Platform	GPIO Input changed	▼	Tait Unified Platform	Display a notification	⚙️	✖️
Click to enter description Tait Unified Platform	GPIO Input changed	▼	Tait Unified Platform	Set emergency mode	⚙️	✖️
Click to enter description Tait Unified Platform	GPIO Input changed	▼	Tait Unified Platform	Control GPIO pin	⚙️	✖️
Click to enter description Tait Unified Platform	GPIO Input changed	▼	Tait Unified Platform	Control GPIO pin	⚙️	✖️
				+ Add new rule ✖️ Remove rule group		

Unified Vehicle

NODE-BASED INTERFACE

The node-based version of the AppBuilder provides a flowchart-like format that allows users to build and edit workflows for complex solutions without the need for coding/programming. It supports a range of solutions from simple timers to sophisticated workforce deployment applications. Below is an example of the node connection method creating a fire alarm which sends alerts to digital radios and mobile phones.



Unified Vehicle

HARDWARE OVERVIEW

WiFi-Only Models

- Support for alphanumeric display-capable TM9300 DMR and TM9400 P25 mobiles.
- Unified Vehicle Remote application supporting voice calls between Android devices and LMR. The tested hardware and operating system is the Sonim XP7 (Android 5.1.1). Compatibility with other devices is likely possible, however, they are yet to be qualified.
- WiFi Over-the-Air-Programming (OTAP) of the mobile radio configuration and firmware updates (requires EnableFleet OTAP application).
- Unified Vehicle AppBuilder.
- External WiFi antenna options.
- 2.4GHz and 5GHz WiFi connection.
- 16GB SD card fitted standard (up to 64GB can be fitted as a custom option).
- The Unified Vehicle platform uses a Linux® Open Embedded operating system, 600 MHz ARM® Coretex® A8 processor, 1GB Flash memory, and 512MB DDR3. Connectivity includes IEEE 802.11b/g/n and Ethernet.

	Remote Application	WiFi OTAP	Voice Recording	AppBuilder
DMR Trunked Tier 3	✓	✓	✓	✓
DMR Conventional Tier 2	✓	✓	✓	✓
MPT	✗	✓	✓	✓
P25 Trunked	✓	✓	✓	✓
P25 Conventional	✓	✓	✓	✓
Analog Conventional	✗	✓	Future	✓

Cellular-Capable Models

- Region-specific cellular (including LTE) data connectivity.
- Unified Vehicle AppBuilder.
- Dual SIM
- 5GHz WiFi and 2.4GHz WiFi connection.
- External antenna required.
- Support for alphanumeric display-capable TM9300 DMR and TM9400 P25 mobiles.
- Unified Vehicle Remote application supporting voice calls between Android devices and LMR. The tested hardware and operating system is the Sonim XP7 (Android 5.1.1). Compatibility with other devices is likely possible, however, they are yet to be qualified.
- WiFi Over-the-Air-Programming (OTAP) of the mobile radio configuration and firmware updates (requires EnableFleet OTAP application).
- 16GB SD card fitted standard (up to 64GB can be fitted as a custom option).

Unified Vehicle

- The Unified Vehicle platform uses a Linux Open Embedded operating system, 600 MHz ARM Cortex A8 processor, 1GB Flash memory, and 512MB DDR3. Connectivity includes IEEE 802.11b/g/n, 3G, LTE and Ethernet.

LMR Network Compatibility

	Remote Application	WiFi OTAP	Voice Recording	AppBuilder
DMR Trunked Tier 3	✓	✓	✓	✓
DMR Conventional Tier 2	✓	✓	✓	✓
MPT	✗	✓	✓	✓
P25 Trunked	✓	✓	✓	✓
P25 Conventional	✓	✓	✓	✓
Analog Conventional	✗	✓	Future	✓

Future Capabilities

Future releases of Unified Vehicle will add support for:

- Bluetooth Data
- Satellite
- API/SDK

Unified Vehicle

CELLULAR CONNECTIVITY OPTIONS

- ▶ **M0** – A WiFi and cellular-ready option. This configuration has no SMA connectors exposed; no external antennas can be connected, therefore the WiFi and cellular functionality is not available. The Ethernet port is available on the front of this unit.
- ▶ **M3** – A WiFi-only option with the capacity to add cellular capability at a later date. This configuration has one SMA connector exposed for the WiFi antenna.
- ▶ **M4** – North America-specific cellular option. This is compliant for operation in North America, please refer to the table below for specific bands. Additional carrier compliance may also be required (L3Harris is working to obtain in some countries, so please contact your L3Harris Representative for more details). The front panel has three SMA connectors for connection with external antennas. This option also has dual SIM capability.

Note: Not all cellular options have compliance in all regions/countries. Please check the compliance matrix below or contact your L3Harris Representative for further information.

Region\Detail	Regulatory Compliances	Regional Approvals	Supported Frequency Bands	Carrier Approvals
M4/US & Canada	FCC, IC	PTCRB	<ul style="list-style-type: none"> • 4G/LTE: 1900(B2), AWS1700(B4), 850(B5), 700(B12/13) • 3G: 1900(B2), 850(B5) 	

Unified Vehicle

MEMORY CARD OPTIONS

Standard package includes:

- ▶ 0 – Unified Vehicle comes standard with a 16GB memory card fitted

RADIO BODY OPTIONS

- ▶ Unified Vehicle is compatible with a remote-control head or hand held control head configuration of the TM9300/TM9400 mobiles

P25 SFEs INCLUDED

- ▶ TMAS059 – MDC1200
- ▶ TMAS065 – Two-Tone Decode
- ▶ TMAS083 – 20/25kHz Channel Restrictions (wideband)
- ▶ TMAS108 – Unified Vehicle API

DMR SFEs INCLUDED

- ▶ TMAS031 – MPT Trunking
- ▶ TMAS083 – 20/25kHz Channel Restrictions (wideband)
- ▶ TMAS081 – GPS Hardware/Location Services
- ▶ TMAS087 – Voice Annunciations
- ▶ TMAS097 – DMR Conventional (Tier 2)
- ▶ TMAS102 – ARC4 Encryption
- ▶ TMAS108 – Unified Vehicle API

Important Note: Any additional SFEs for these mobiles must be ordered separately.

EXTERNAL SPEAKER OR MOBILE UPGRADE OPTIONS

Speaker options for factory fitted kits:

- ▶ 0 – No external speakers
- ▶ 1 – Includes an external speaker for HHCH options

Unified Vehicle can be purchased factory fitted (TU2000) or as an upgrade kit for existing TM9300/TM9400 mobiles. The appropriate kit must be ordered based on the current configuration of the mobile – see CPPN on Page 11.1-48 for options.

- ▶ A – Upgrade kit for a TM9300 DMR or TM9400 P25 mobile currently with a fixed-head configuration. This kit adds the Unified Vehicle option and contains the necessary parts to remotely mount the control head.
- ▶ B – Upgrade kit for a TM9300 DMR or TM9400 P25 mobile currently with an HHCH or remote LCH configuration. This kit adds Unified Vehicle to the current configuration.
- ▶ C – Kit adds the cellular options (M4) to cellular-capable formats (M0 or M3). The front panel has three SMA connectors for connection with external antennas.

Unified Vehicle

ACCESSORIES



ANTENNAS

► WiFi-Only Antenna

Suitable where WiFi-only will be utilized on Unified Vehicle and will increase the WiFi coverage that can be achieved compared with the internal WiFi antenna. This antenna operates in both the 2.4GHz and 5GHz bands.

► Multi-Function Antenna

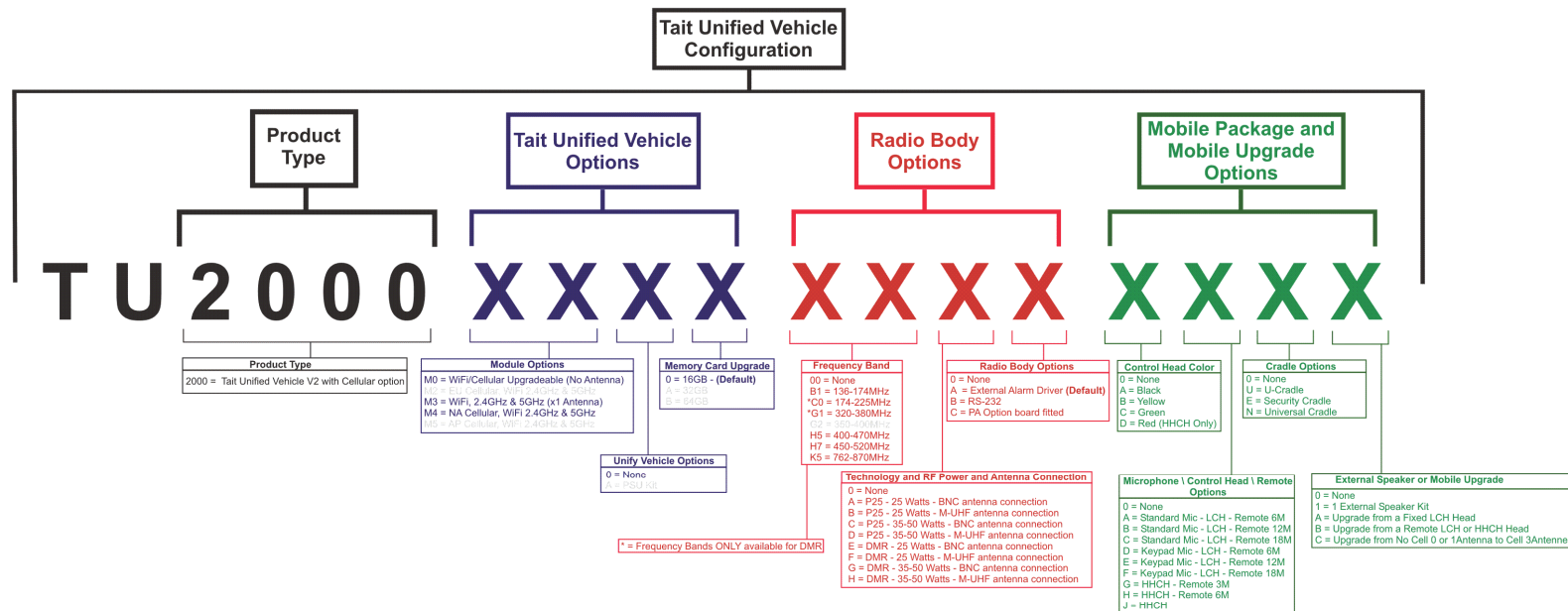
This antenna contains elements for a 2.4 WLAN antenna, a 5GHz WLAN antenna, and two cellular antennas for diversity and is compliant for LMR, WiFi, Bluetooth, and Cellular releases of Unified Vehicle.

Single WiFi Antenna Kit		
T05-00031-0004	Antenna Kit - WiFi 2.4/5GHz Ext SMA (includes cable)	
Multi-Function Antenna Kit		
T05-00031-0001	Antenna Kit - Multi-Element Antenna with BNC Adaptor (includes cables)	
T05-00031-0002	Antenna Kit - Multi-Element Antenna with Mini UHF Adaptor (includes cables)	
T05-00031-0003	Antenna Kit - Multi-Element Antenna with No Adaptors (includes cables)	

The next page contains the Cellular-capable Unified Vehicle Product Codes for Commercial Packages (PCCP).

TU2000

Product Codes for Commercial Packages



Example of: TU2000M400000000000

Product Type
TU2000 = Tait Unified Vehicle V2 with Cellular Option

Mobile Configuration
M4 = NA Cellular, B/T, WiFi 2.4/5GHz
0 = None
0 = 16GB

Tait Unified Vehicle Module Option
PCMCIA Slot Option
Memory Card Option



Please Note:
Not all products have compliance in all regions/countries.
Please contact your Tait Representative for further information.

Unified Vehicle

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

Unified Vehicle

P25 WiFi/Cellular (3x Antenna)

E/C	Item Code	Description	List Price
S	TU2000M400K5DAAAU0	P25Cell 762-870M 50W MUHF Mic UCdl 3Ant	\$ 2,355.00
S	TU2000M400K5DAADU0	P25Cell 762-870M 50W MUHF KMic UCdl 3Ant	\$ 2,455.00
S	TU2000M400K5DAAHU0	P25Cell 762-870M 50W MUHF HHCH UCdl 3Ant	\$ 2,249.00

DMR WiFi/Cellular (3x Antenna)

E/C	Item Code	Description	List Price
S	TU2000M400K5HAAAU0	DMRCell 762-870M 50W MUHF Mic UCdl 3Ant	\$ 1,759.00
S	TU2000M400K5HAADU0	DMRCell 762-870M 50W MUHF KMic UCdl 3Ant	\$ 1,859.00
S	TU2000M400K5HAAHU0	DMRCell 762-870M 50W MUHF HHCH UCdl 3Ant	\$ 1,669.00

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TeamPTT™



TEAMPTT OVER CELLULAR SOLUTION

OVERVIEW

TeamPTT is a push-to-talk system for cellular infrastructures that can connect to land mobile radio (LMR) to provide communications to wide geographical areas. It is a secure, IP-based communications solution that can bridge LMR networks (Analog, P25, MPT-IP or DMR) to cellular communications through the TeamPTT infrastructure and smartphone application.

The TeamPTT application (available for Android™ and iOS® devices) operates over any IP bearer (3G/4G, WiFi®) that works with L3Harris-Tait radio networks when connected. It supports a wide range of smartphones and tablets, which makes it easier for users who are unfamiliar with radios to interact with a private radio network.

The main advantages of combining the TeamPTT network with L3Harris-Tait private networks are

- Improved coverage and the ability to communicate when beyond the service area of the radio network or when in-coverage black-spots, such as in buildings, parking lots, or tunnels where cellular or Wi-Fi signals are present.
- Increased number of users and the ability to enable non-radio users to participate in group communications.
- Greater discretion to enable covert users, such as undercover detectives and investigators, to communicate using a standard smartphone to better blend in to their surroundings.

A basic TeamPTT network consists of

- the customer's end user devices, such as smartphones, running the TeamPTT application
- the TeamPTT on-premise server
- an internet connection between the end user devices and servers, such as cellular or Wi-Fi
- an optional connection to an LMR network

The TeamPTT network connects to L3Harris-Tait radio networks to increase coverage (radio frequency (RF) and users) through a range of connection options with dedicated interfaces, such as AIS (MPT-IP or DMR Trunking) and ISSI (P25 Trunking), and through the TN8271 Network Gateway. The gateway converts audio from a range of LMR equipment or suitable 4-wire E&M connection to an audio data stream for TeamPTT.

L3Harris-Tait radio networks typically consist of several sites, and one or more controllers that are interconnected using an IP backbone. Each site consists of base stations that provide the radio link to the radio users. The controller supervises the overall management and configuration of the network, and controls and switches the audio for all group and individual calls between different sites.

To successfully connect to the TeamPTT network, the L3Harris-Tait radio network may need to be upgraded to handle the extra load of additional calls.

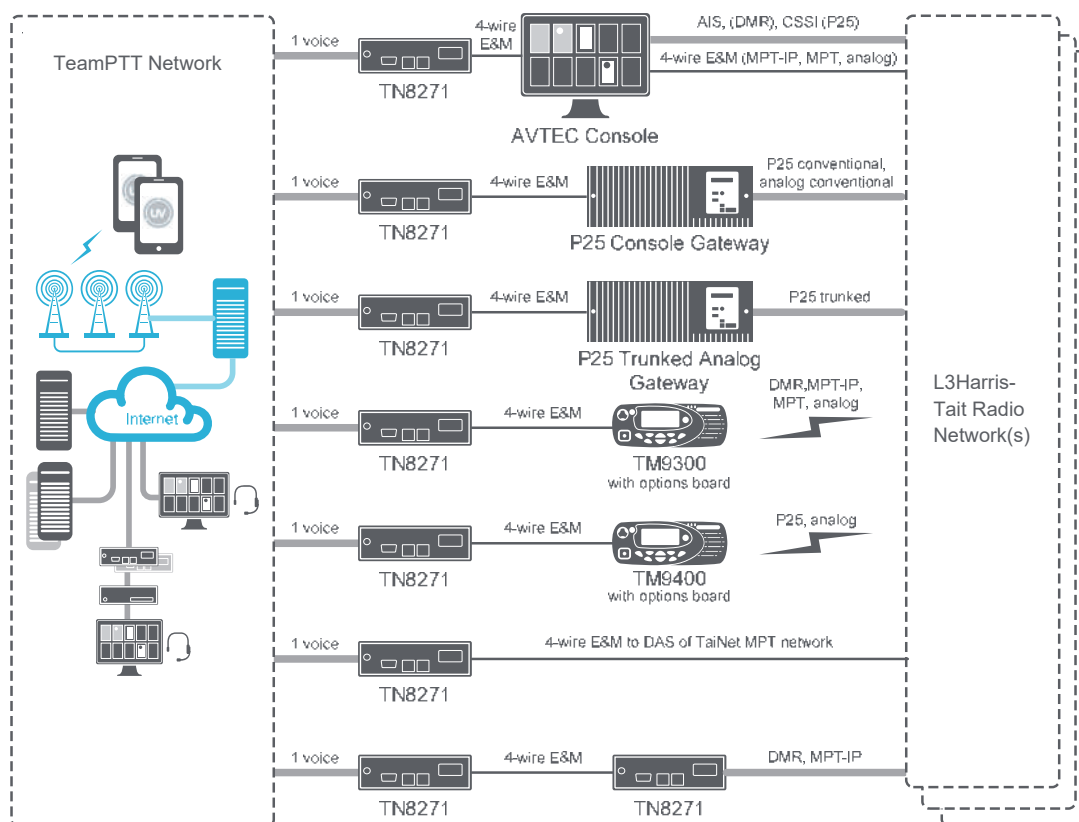


Figure 1. Connectivity options between TeamPTT network and L3Harris-Tait Radio networks

*For the TeamPTT network, the TN8271 Network Gateway is sold including installation services as products TUSE601 and TUSE602.

TEAMPTT LICENCES AND GATEWAYS

ON-PREMISE SERVER – L3HARRIS-TAIT-PROVIDED SERVER

User Permanent Licenses

Item Code	Description
TNAS606	25 TeamPTT Licenses - Customer Hosted upfront cost
TNAS607	100 TeamPTT Licenses - Customer Hosted upfront cost
TNAS605	5 Extra TeamPTT Licenses - Customer Hosted upfront cost (Pre-requisite TNAS606 or TNAS607)

LMR Integration Gateway and Services

Item Code	Description
TT0008-0001	Service – TeamPTT on Prem Mid Lvl w/Serv
Optional Items	Description
TUSE600	SSL certificate per equipment
TUSE601	Service – Initial TeamPTT Gtwy w/Serv
TUSE602	Service - 1 Extra TeamPTT Gtwy w/Serv
TPTM604	Service - TeamPTT Regional License Disp 1 User (Mth)
TUSE604	Service - TeamPTT VPN Gateway/Services
TPTM605	Service – TeamPTT OnPrem Maint Add 5 Users (1 Yr)
TPTM607	Service – TeamPTT OnPrem Maint 100 Users (1 Yr)

CELLULAR + WIFI WITH LMR INTEGRATION

LMR Integration Gateway and Services

Item Code	Description
TNAS608	License - TeamPTT per ISSI connection
TNAS609	License - TeamPTT per AIS connection
TNAS610	License -Concurrent Call (for AIS/ISSI)
Item Code	Description
TUSE601	TeamPTT - Initial TN8271 Gateway with Services attached
TUSE602	TeamPTT - 1 Extra TN8271 Gateway with Services attached (Prerequisite TUSE601)
Service Items	Description
TPTM604	Service - TeamPTT Regional License Disp 1 User (Mth)

GLOSSARY AND DEFINITIONS

AIS	Application Interface Specification (DMR Association)
AS-IP	Analog Simulcast over IP
DMR	Digital Mobile Radio
E&M	Ear & Mouth
HTTPS	Secure Hypertext Transfer (or Transport) Protocol
IP	Internet Protocol
ISSI	Inter-RF Subsystem Interface (P25 standardized interface)
LAN	Local Area Network
LMR	Land Mobile Radio
MPT	Industry standard for trunked radio communications networks
MPT-IP	MPT over IP
NMS	Network Management System
NTP	Network Time Protocol
P25	Project 25
PTToC	Push-To-Talk over Cellular
RF	Radio Frequency
SNMP	Simple Network Management Protocol
WAN	Wide Area Network

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

TeamPTT

TeamPTT Regional Server

E/C	Item Code	Description	List Price
S	SLA0011001AB000000	Service - Team PTT on Prem Mid Lvl w/Serv	\$ 7,271.00
S	SLA0012001AC000000	TeamPTT VPN Client AC 110-240VAC	\$ 4,510.00

TeamPTT Licenses

E/C	Item Code	Description	List Price
S	TNAS605	License - 5 Extra TeamPTT On Premise	\$ 4,188.00
S	TNAS606	License - 25 TeamPTT On Premise	\$ 20,985.00
S	TNAS607	License - 100 TeamPTT On Premise	\$ 83,756.00
S	TNAS608	License - TeamPTT ISSI Connection	\$ 8,017.00
S	TNAS609	License - TeamPTT AIS Connection	\$ 8,017.00
S	TNAS610	License - Concurrent Call (for AIS/ISSI)	\$ 4,298.00

Tait TeamPTT Gateways and Services

E/C	Item Code	Description	List Price
S	TUSE600	Service - SSL Certificate Per Eqpmt 1yr	\$ 200.00
S	TUSE601	Service - Initial TeamPTT Gtwy w/Serv	\$ 1,482.00
S	TUSE602	Service - 1 Extra TeamPTT Gtwy w/Serv	\$ 1,289.00
S	TPTM604	TeamPTT Regional License Disp 1 User (Mth)	\$ 46.00
S	TUSE604	Service - TeamPTT VPN Gateway/Services	\$ 3,400.00
S	TPTM605	TeamPTT OnPrem Maint Add 5 Users (1 Yr)	\$ 474.00
S	TPTM607	TeamPTT OnPrem Maint 100 Users (1 Yr)	\$ 7,636.00

TP8100 Portable Radios - Analog

- ▶ **Portable Radio**
- ▶ **Options & Accessories**



TP8100

Rugged • Reliable • Waterproof

Uncompromised build quality and sleek mechanical design make this reliable and waterproof portable radio ideal for situations when only the toughest will do. The TP8100 is sure to suit as a standalone portable or within a wider system solution.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

¹ - NON-ETSI Approved

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:88 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:04 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TPXXXX IS Accessories page.

For all inquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

TP8100

Package Configurations

Use the options below to complete the TP8100 item codes shown on pages 12.1-5 to 12.1-14. For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.

For Example:

Replace characters in the item code to reflect the chosen options.

STANDARD PACKAGE	
TP8110-FFCY-XZ	Package with standard black front panel
TP8110W-FFCY-XZ	Package with colored front panel (red, yellow & orange)
NON-INCENDIVE PACKAGE	
TP8110-FFGY-XZ	Non-Incendive Package with standard black front panel
TP8110W-FFGY-XZ	Non-Incendive Package with colored front panel (red, yellow & orange)

Where:

Frequency Options (FF):

B1 = 136-174MHz

C0 = 174-225MHz

G2 = 350-400MHz¹

H5 = 400-470MHz

H6 = 450-530MHz

K6 = 806-870MHz¹

L3 = 896-941MHz¹

¹ - NON-ETSI Approved

To order:

replace FF with the required frequency code

Where:

Package Options (X):

0 = None

2 = Man Down

3 = Encryption

7 = Non-Incendive (NI)

8 = Non-Incendive (NI) + Man Down

9 = Non-Incendive (NI) + Encryption

To order:

► replace X with the required option

Where:

Charger Plug Pack Options (Z):

D = US/CAN

To order:

► replace Z with the required option

Note:

- Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- Please contact your customer support representative for color availability.
- Please see pages 12.1-15 to 12.1-17 for a full list of TP8100 radio features

Where:

Antenna Options (Y):

A = 136-151MHz 17.0cm (6 3/4 in) Helical

B = 150-162MHz 15.4cm (6 1/8 in) Helical

C = 162-174MHz 14.7cm (5 3/4 in) Helical

E = 400-470MHz 15.5cm (6 1/8 in) Whip

F = 450-520MHz 14.0cm (5 1/2 in) Whip

G = 400-470MHz 8.8cm (3 1/2 in) Helical

J = 450-520MHz 7.6cm (3in) Helical

L = 762-870MHz Helical (Stubby)

M = 762-870MHz 1/2 in) Whip

N = 896-941MHz 1/4 in) Whip

P = 896-941MHz (1/2 in) Whip

Q = 350-400MHz Helical

R = 350-400MHz Whip

S = 340-390MHz Helical

T = 136-225MHz Tuneable

V = 380-420MHz Whip

W = 136-151MHz no Badge Helical

Y = 400-470MHz no Badge Whip

To order:

► replace Y with the required frequency code

Where:

Front Panel Color Options (W):

A = Red

B = Yellow

C = Orange

To order:

► replace W with the required option

TP8100

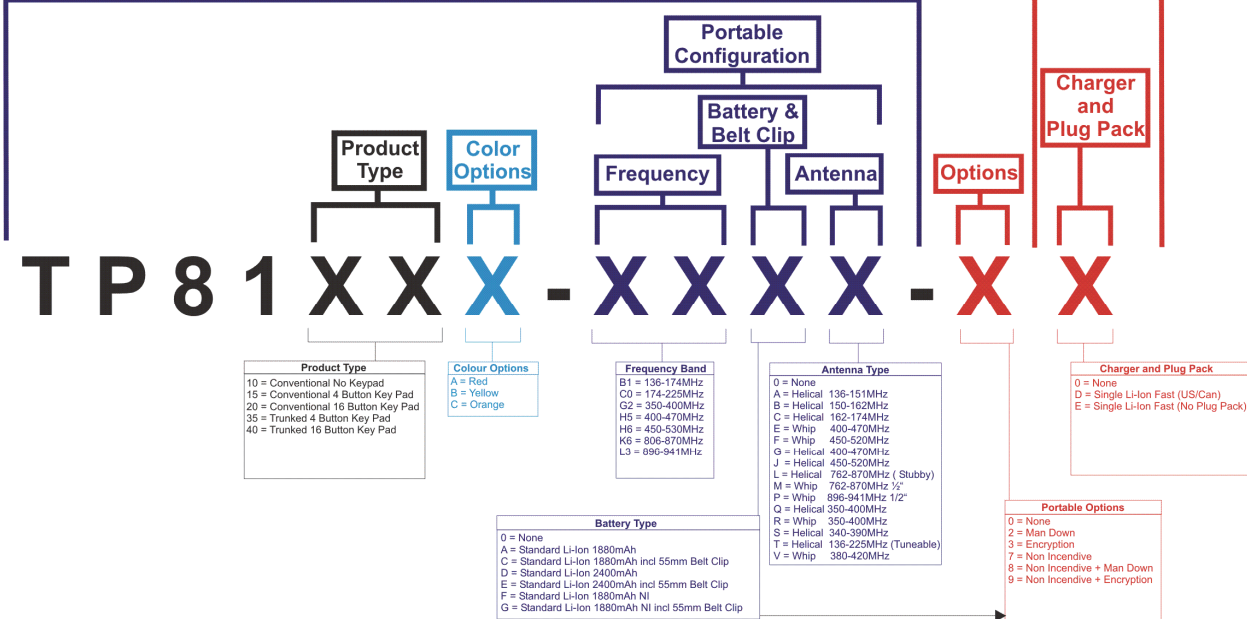
Product Codes for Commercial Packages

Edition: 10

High Level Package Number For TP8100 Ordering:- Radio Body and Battery Pack, Antenna plus Option (PCB) and Charger

Radio Package Number For TP8100 Ordering:- Radio Body and/or Battery Pack, Antenna plus Option (PCB)

Radio Body Number For TP8100 Ordering:- Radio Body and/or Battery Pack and Antenna



Please Note:
Not all products have compliance in all regions/countries.
Please contact your Harris Representative for further information.

All reasonable efforts have been made to ensure all information published on this document is as accurate and up-to-date as possible. The paper configurator is a guide only and doesn't distinguish illegal configurations. Use the online configurator to ensure the configuration is correct before placing an order on Baan.

Example of: TP8140-H5CE-0D

Product Type
TP8140 = Trunked 16 Button Key Pad

Portable Configuration and Battery
H5 = 400-470MHz, Frequency Band
C = Standard Li-Ion, Battery with Clip
E = 400-470MHz, Whip Antenna

Option (PCB) and/or Charger and Plug Pack
0 = Options (PCB)
D = Single Li-Ion Charger Module and US/CAN Plug Pack



10 October 2016

Doc ID: 2877

TP8110 - 16 Channels

Conventional

Standard package includes:

- ▶ 16 Channels
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ Voice inversion scrambler
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.
- ▶ ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6 ¹	806-870 ¹	✓	✓	✓	✓	✓
L3 ¹	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8115 - 128 Channels

Conventional

Standard package includes:

- ▶ 128 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4

Note:

- Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.
- ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8100

TP8120 - 350 Channels

Conventional

Standard package includes:

- ▶ 350 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ PTT Redial
- ▶ Repeater talk-around
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4

Note:

- Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.
- ¹ – NON-ETSI Approved



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8110 - 16 Channels Non-Incendive

Conventional

Standard package includes:

- ▶ 16 Channels
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ Voice inversion scrambler
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ For Non-Incendive overview, please refer to pages 12.1-18 to 12.1-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.



Frequency Band	TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1 136-174	✓	✓	✓	✓	✓
C0 174-225	✓	✓	✓	✓	✓
G2 350-400 ¹	✓	✓	✓	✓	✓
H5 400-470	✓	✓	✓	✓	✓
H6 450-530	✓	✓	✓	✓	✓
K6 806-870 ¹	✓	✓	✓	✓	✓
L3 896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all inquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

TP8115 - 128 Channels Non-Incendive

Conventional

Standard package includes:

- ▶ 128 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ Repeater talk-around
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ For Non-Incendive overview, please refer to pages 12.1-18 to 12.1-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all inquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

TP8120 - 350 Channels Non-Incendive

Conventional

Standard package includes:

- ▶ 350 Channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable channel selector
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CCDI (Computer Controlled Data Interface)
- ▶ SELCALL (Selective calling)
- ▶ CTCSS/DCS
- ▶ Key lock
- ▶ Night use
- ▶ PTT Redial
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ For Non-Incendive overview, please refer to pages 12.1-18 to 12.1-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all inquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

TP8100

TP8135 - 100 Preset Call

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8100

TP8140 - 100 Preset Call

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

TP8135 - 100 Preset Call Non-Incendive

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ For Non-Incendive overview, please refer to pages 12.1-18 to 12.1-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability

For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all inquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

TP8140 - 100 Preset Call Non-Incendive

Trunked

Standard package includes:

- ▶ 100 Alphanumeric preset calls
- ▶ 10 Conventional channels
- ▶ 24 Character LCD display
- ▶ Angled rubber volume knob
- ▶ Large PTT (Push-To-Talk) button
- ▶ Lone worker
- ▶ IP67 Certified, Military standard 810 C, D, E & F
- ▶ Programmable emergency key
- ▶ Side mounted accessory connector
- ▶ Swipe battery contacts
- ▶ Rugged construction - two-shot moulding
- ▶ 3 Programmable function keys - including emergency key
- ▶ CTCSS on conventional channel
- ▶ DCS (Tx only) on conventional channel
- ▶ Key lock
- ▶ Night use
- ▶ PTT redial
- ▶ SDM (Short Data Message)
- ▶ Stun & revive (Remote)

Options:

- ▶ Encryption –
 - For overview, please refer to pages 12.1-23 to 12.1-25
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4
- ▶ Man Down –
 - For configuration options, please refer to the TP8100 Portable configuration table - page 12.1-4

Note:

- ▶ Not all products have compliance in all regions/countries. Please contact your L3Harris Representative for further information.
- ▶ For Non-Incendive overview, please refer to pages 12.1-18 to 12.1-22
- ▶ Front Panel - Red, Yellow or Orange front panels are available in addition to the standard black front panel - please contact your customer support representative for availability
- ▶ For more configuration options, please refer to the TP8100 Portable configuration table on page 12.1-4.



Frequency Band		TP8110 Conventional	TP8115 Conventional	TP8120 Conventional	TP8135 Trunked	TP8140 Trunked
B1	136-174	✓	✓	✓	✓	✓
C0	174-225	✓	✓	✓	✓	✓
G2	350-400 ¹	✓	✓	✓	✓	✓
H5	400-470	✓	✓	✓	✓	✓
H6	450-530	✓	✓	✓	✓	✓
K6	806-870 ¹	✓	✓	✓	✓	✓
L3	896-941 ¹	✓	✓	✓	✓	✓

Note: ¹ - NON-ETSI Approved.

Cautionary Note

All TP8100 IS radios certified to Class 1 Division 1 under FM 3610:1988 will, from the 1st January 2016, be reclassified at the point of manufacture as Class 1 Division 2 under FM 3611:2004 (Non-Incendive). All FM IS Class I Division 1 products manufactured and delivered to customers prior to 1st of January 2016 will remain Class 1 Division 1.

Some accessories for IS radios delivered prior to 1st of January 2016 can continue to be purchased, with IS ratings retained. Please refer to TP8100 IS Accessories section.

For all inquiries relating to the sale and deployment of Intrinsically Safe portables and their accessories, please contact your local dealer for information specific to your operational needs.

TP8100

TP8100 - Features Comparison

RADIO FEATURES	TP8110	TP8115	TP8120	TP8135	TP8140
Number of Conventional Channels	16	128	350	10	10
Number of Alphanumeric Presets	●	●	●	100	100
24 Character LCD Display	●	✓	✓	✓	✓
Colored Front Panel Option	✓	✓	✓	✓	✓
Encryption Options Board	✓	✓	✓	✓	✓
Economy Mode	✓	✓	✓	✓	✓
Fast Charger	✓	✓	✓	✓	✓
GPS Capability (External Speaker Mic) <i>Note: Requires customised firmware, please contact your L3Harris customer support representative</i>	✓	✓	✓	✓	✓
Non-Incendive (Optional)	✓	✓	✓	✓	✓
IP67 Certified	✓	✓	✓	✓	✓
Large PTT Button	✓	✓	✓	✓	✓
Li-Ion Battery as Standard	✓	✓	✓	✓	✓
Lone Worker	✓	✓	✓	✓	✓
Long Shift Life (11-14hrs, dependent on battery)	✓	✓	✓	✓	✓
Man Down (Optional)	✓	✓	✓	✓	✓
MEPS Approved Plug Pack	✓	✓	✓	✓	✓
Military Standards 810 C, D, E and F	✓	✓	✓	✓	✓
Multi View Indicator LED	✓	✓	✓	✓	✓
Multi Way Charger (Optional)	✓	✓	✓	✓	✓
Programmable Channel Selector	✓	✓	✓	✓	✓
Programmable Emergency Key	✓	✓	✓	✓	✓
Shared Accessories with other L3Harris Portables	✓	✓	✓	✓	✓
Side Mounted Accessories Connector	✓	✓	✓	✓	✓
Stainless Steel Antenna Connector	✓	✓	✓	✓	✓
Swipe Battery Contacts	✓	✓	✓	✓	✓
Two-shot Moulded Construction	✓	✓	✓	✓	✓
Voice Inversion Scrambler	✓	✓	✓	✓	✓
3 Programmable Function Keys - including Emergency Key	✓	✓	✓	✓	✓
Alphanumeric Labels	●	●	✓	●	✓
ANI (Automatic Number Identification)	Tx only	✓	✓	●	
Audible Indicator Control	✓	✓	✓	✓	✓
Auto Noise Reduction (ANR)	✓	✓	✓	✓	✓
Automatic call back	●	●	●	✓	✓
Auto Quiet Timer Countdown Select	✓	✓	✓	●	●
Background search sequence	●	●	●	✓	✓
Busy Channel Lockout (Also known as Transmit Inhibit)	✓	✓	✓	●	●
Call Diversion	✓	✓	✓	✓	✓

TP8100

TP8100 - Features Comparison

RADIO FEATURES	TP8110	TP8115	TP8120	TP8135	TP8140
Call in absence indicator	●	●	●	✓	✓
Call Queuing	●	✓	✓	✓	✓
Call time limit display	●	●	●	✓	✓
Caller ID	●	✓	✓	●	●
CCDI (Computer Controlled Data Interface)	✓	✓	✓	●	●
Channel Presets	✓	✓	✓	✓	✓
Conventional Channel Operation	✓	✓	✓	✓	✓
CTCSS (Continuous Tone Controlled Squelch System)	✓	✓	✓	●	●
CTCSS on conventional channel (Trunked)	●	●	●	✓	✓
CTCSS on traffic channel (Trunked)	●	●	●	✓	✓
DCS (Tx only)	●	●	●	✓	✓
DCS (Digitally Coded Squelch)	✓	✓	✓	●	●
Deferred Calling	✓	✓	✓	●	●
DTMF (Dual Tone Multi Frequency)	✓	✓	✓	●	✓
Dynamic power control	●	●	●	✓	✓
Dynamic regrouping	●	●	●	✓	✓
Emergency Mode Auto Alert	✓	✓	✓	●	●
Emergency Mode Auto Radio Reset	✓	✓	✓	●	●
Emergency Mode Key-press Options	✓	✓	✓	●	●
FFSK	✓	✓	✓	●	●
Free Format Sequences	✓	✓	✓	●	●
G-Star Signalling (Encode)	✓	✓	✓	●	●
Join busy group	●	●	●	✓	✓
Key Beeps / Confidence Tones / Audible Indicators	✓	✓	✓	✓	✓
Key Lock	✓	✓	✓	✓	✓
LCD Contrast Adjust	●	✓	✓	✓	✓
MDC1200 (En/Decode)	✓	✓	✓	●	●
Manual site select	●	●	●	✓	✓
Monitor Function	✓	✓	✓	✓	✓
Multiple network capability	●	●	●	✓	✓
Multiple SELCALL Networks	✓	✓	✓	●	●
Network name	●	●	●	✓	✓
Night use	●	✓	✓	✓	✓
Nuisance Delete	✓	✓	✓	●	●
Programmable Bandwidth	✓	✓	✓	✓	✓
Programmable Group Membership	●	✓	✓	●	●
Programmable Group Tone	✓	✓	✓	●	●
Programmable User Defined SELCALL Tone Set	✓	✓	✓	●	●
PTT Redial	●	●	✓	✓	✓

TP8100

TP8100 - Features Comparison

RADIO FEATURES	TP8110	TP8115	TP8120	TP8135	TP8140
Quiet interrogation	✓	✓	✓	●	●
Quiet mode	●	●	●	✓	✓
Repeater talkaround	✓	✓	✓	●	●
Scanning	✓	✓	✓	●	●
Scanning/User programmable scan	✓	✓	✓	●	●
SDM (Short Data Message) Transmit	●	●	✓	●	✓
SDM (Short Data Message) Receive	●	✓	✓	✓	✓
SELCALL (Selective calling)	✓	✓	✓	●	●
Separate Rx alert/ring patterns	✓	✓	✓	●	●
Side-tone generation	✓	✓	✓	●	●
Short menu key	●	✓	✓	✓	✓
Squelch override	✓	✓	✓	●	●
Status labels	●	✓	✓	✓	✓
Status labels - Control	✓	✓	✓	●	●
Stun & Revive (Remote)	✓	✓	✓	✓	✓
Talker ID (MPT)	●	●	●	✓	✓
Transmit Lockout	✓	✓	✓	●	●
Transmit Low Power	✓	✓	✓	✓	✓
Transmit Timer	✓	✓	✓	✓	✓
Trunked Channel Display	●	●	●	✓	✓
Type 99 Decode	✓	✓	✓	●	●
Voting	✓	✓	✓	●	●
Zones 15,20	✓	✓	✓	●	●
CALL TYPES	TP8110	TP8115	TP8120	TP8135	TP8140
Advanced hunt routines	●	●	●	✓	✓
Broadcast group call	●	●	●	✓	✓
Conference group call	●	●	●	✓	✓
Emergency Call	✓	✓	✓	✓	✓
Group Calls	✓	✓	✓	✓	✓
Interfleet calls	●	●	●	✓	✓
PABX calls (Private Automatic Branch Exchange)	●	●	●	✓	✓
Preset Calls	✓	✓	✓	✓	✓
Priority Call	✓	✓	✓	✓	✓
Programmable trunked ring patterns	●	●	●	✓	✓
PSTN calls (Public Switched Telephone Network)	●	●	●	✓	✓
Status calls	●	●	●	✓	✓
Top Mounted Programmable Emergency Call	✓	✓	✓	✓	✓

NON-INCENDIVE (NI)

Overview

For greater safety in hazardous locations the Non-Incendive TP8100 portables are available with internationally recognized Factory Mutual™ approvals. Both trunked and conventional portables in the TP8100 series can be supplied with NI features for use in hazardous environments. Manufactured to comply with internationally recognized Factory Mutual™ (FM™) Approvals, the TP8100 is classed NI (Non-Incendive). Like the rest of the TP8100 series, the NI model is built to IP67 dust and water resistance standards, and is designed for the operation in harshest of environments. A full range of FM™ approved accessories is also available, including rugged speaker-mics and noise cancelling headsets.

Tait Communications has the following Factory Mutual™ approval for the TP8100 NI portable product range:

- ▶ Non-Incendive - for use in:
 - Class I
 - Division 2
 - Groups A, B, C & D with a temperature rating of T4 Ta=40°C
 - Class II & III
 - Division 1 or 2h
 - Groups E, F & G with a temperature rating of T4 Ta=40°C
 - Indoor & outdoor
 - IP67 Hazardous (classified) locations

Temperature Rating Code

Identifications Code	Maximum Temperature (°C)	Identification Code	Maximum Temperature (°C)
T1	450	T3A	180
T2	300	T3B	165
T2A	280	T3C	160
T2B	260	T4	135
T2C	230	T4A	120
T2D	215	T5	100
T3	200	T6	85

Note:

- ▶ Compliance shall be verified by measurement based on the highest temperature which may be attained in service under the most adverse conditions (but within rated values) by any part or surface of the equipment. The most adverse conditions include overloads and fault conditions recognized in the specific standard for the Type of Protection concerned.

Non-Incendive (NI)

Background

► What is Non-Incendive?

- Electrical equipment that is incapable of releasing sufficient electrical or thermal energy under **normal operating conditions** only which cause ignition of a specific hazardous mixture and air. This rating is required for equipment to be used in **Division 2** environments.

Non-Incendive approvals are classified by classes, divisions, groups and a temperature rating. These can be defined as follows:

► Class:

- this can be defined as relating to the industry type in which the equipment will operate. Classes range from Class I to Class III, where Class I is for such industries as petroleum/gas/oil etc., Class II is for such industries as heavy engineering (iron-ore, magnesium, coke, coal, charcoal, etc.) and the food industry (starch, grain processing, e.g. flour mills etc.) Class III is for industries dealing with fibers.

► Division:

- this can be defined as relating directly to the proximity of the risk. That is, if the hazardous mixture is in direct contact with the environment (Division 1, closer proximity) or is it enclosed within a container or system, or ventilated (Division 2, further proximity).

► Group:

- this is the type of atmosphere and ranges from Group A through to Group G. Group A covers atmospheres containing Acetylene gas and Group B covers atmospheres containing Hydrogen gas. These are both very unstable and explode at low temperatures. Group C covers vapours of Ethylene and Group D covers Propane vapour atmospheres. Group E includes atmospheres containing various types of metal dust, Group F has coal dust, and Group G contains grain dusts.

► Temperature rating:

- Temperature rating alone is probably the most important factor for NI hand-portables. The temperature rating is a maximum temperature (°F / °C) and an associated identification code. The temperature rating means that where any hazardous mixture explodes/combusts at less than the stated maximum temperature, then the hand-portable cannot be used in this environment. If units do not meet the temperature requirement then there is no basis for supplying radios regardless of whether or not the units meet the other standards i.e. class, division and group.
- It is important to note that Tait does not wish to advise the customer what ratings they would need for their work environment, as liability becomes an issue here. There are a number of publications which detail combustion thresholds of hazardous mixtures and the customer should research this themselves.

Non-Incendive (NI)

What Tait can offer

Tait Communications currently have both the following Factory Mutual™ Approval for the TP8100 Series NI product range (all bands and variants):

- ▶ Approved as Non-Incendive for use in Class I, Division 2, Groups A, B, C & D with temperature rating of T4 Ta=40°C
- ▶ Approved as suitable for use in Class II & III, Division 1, Groups E, F & G; temperature class T4 Ta=40°C; indoor & outdoor, IP67 hazardous (classified) locations.

What this means:

- ▶ Class I, Division 2 - This is a location in which:
 - (a) volatile flammable gasses are handled, processed or used, but in which the hazardous liquids, vapours or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in case of abnormal operation of equipment;
 - OR
 - (b) in which hazardous concentration of gases or vapours are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operation of the ventilating equipment;
 - OR
 - that is adjacent to a Class I, Division 1 location, and to which hazardous concentrations of such gases or vapours might occasionally be communicated unless such communication is prevented by adequate positive-pressure ventilation from a source of clear air, and effective safe-guards against ventilation failure are provided.
- ▶ Groups A, B, C, D, E, F & G: These are various atmospheres for which the Tait hand-portables are approved to operate in, in conjunction with the above information and are rated as follows:
 - Group A atmospheres containing acetylene gas
 - Group B atmospheres containing hydrogen gas
 - Group C atmospheres containing ethylene vapours
 - Group D atmospheres containing propane vapours
 - Group E atmospheres containing metal dusts
 - Group F atmospheres containing carbonaceous dusts
 - Group G atmospheres containing organic dusts
- ▶ Temperature T4 Ta=40°C
 - Where any hazardous mixture explodes at less than 40°C, Tait hand-portables are not approved to operate in these environments.

Non-Incendive (NI)

Accessories

The TP8100 NI range of portables are only approved to be Non-Incendive when used in conjunction with the NI approved accessories and FM™ Approved battery packs.

► Batteries:

- T03-24011-AAAA TP8100 Battery - Li-Ion 1800mAh
- T03-24011-ABAA TP8100 Battery -Li-Ion 1800mAh complete with Belt Clip

Note: If a customer has a requirement to charge their batteries within a hazardous environment, we cannot supply our chargers as these are NOT FM™ Approved.

► Audio Accessories & Antennas

- Please contact your L3Harris customer services representative.

► This certificate is issued for the following equipment:

- T03-2400n-abcd, TP8100 Portable Radio
- NI / I / 2 / ABCD / T4 Ta=40°C, IP67
- S / II / III / 2 / EFG, IP67
- n = software function / user interface: 1, 2, 3, 4, 5, 6
- a = Frequency Band: B, C, D, E, F, G, H
- b = Customer Variants: A-Z
- c = Internal Options: A
- d = Color: A, B, C, D

► Special Conditions of Use:

1. When used with Tait Communications battery pack (P/N T03-20011-AAAA).
2. The specific accessories & antenna options that may be used with the radios above are listed within the Tait Communications service manuals part number MPC-00003-xx.

Non-Incendive (NI)

Disclaimer

The following classification and rating details are only meant to be a guide for quick reference and Tait Communications makes no claims to the accuracy of the items in the appendix below:

- ▶ Group A atmospheres - Atmospheres containing Acetylene gas.
- ▶ Group B atmospheres - Atmospheres containing Hydrogen gas.
- ▶ Group C atmospheres - Chemical (Ethylene based)
 - Acetaldehyde
 - Diethylamine
 - Ethyl mercaptan
 - Tetrahydrofuran
 - Crotonaldehyde
 - Diethyl ether
 - Hydrogen sulphide
 - Epichlorohydrin
 - 2-nitropropane
 - (UDMH 1, 1-dimethylhydrazine)
 - Hydrogen cyanide
 - n-butyraldehyde
 - Carbon monoxide
 - Ethyl sulphide
 - Unsymmetrical dimethylhydrazine
 - Allyl alcohol
 - Morpholine
 - Ethylenimine
 - Cyclopropane
 - Ethylene
- ▶ Group D atmospheres - Chemical (Propane based)
 - Acetic acid
 - Acetone
 - Acrylonitrile
 - Ammonia
 - Benzene
 - Butane
 - Soprene
 - Isopropyl ether
 - Mesityl oxide
 - Methane (natural gas)
 - Methanol (methyl gas)
 - Toluene
 - Vinyl acetate
 - Vinyl chloride
 - Xylenes
 - Ethylene diamine
 - Ethylene dichloride
 - Ethylene glycol monomethyl ether
 - Gasoline
 - Heptanes
 - Propane
 - Hexanes
 - 1-propanol
 - 2-propanol
 - Propylene
 - Styrene
 - Ethanol (ethyl alcohol)
 - Ethyl acetate
 - Ethyl acrylate (inhibited)
 - 2-methyl-2-propanol
 - Petroleum naphtha
 - Pyridine
 - Octanes
 - Pentanes
 - 1-pentanol (amyl alcohol)
 - 2-butanol (secondary butyl alcohol)
 - n-butyl acetate
 - Isobutyl acetate
 - di-isobutylene
 - Ethane 3-methyl-1-butanol
 - Methyl ethyl ketone
 - Methyl isobutyl ketone
 - 2-methyl-1-propanol

For classification of areas involving ammonia atmosphere, see Safety Code for Mechanical Refrigeration (ANSI/ASHRAE 15-1978) and Safety Requirements for the Storage and Handling of Anhydrous Ammonia (ANSI/CGA G2.1-1972).

A Saturated hydrocarbon mixture boiling in the range of 20-135N C (68-275NF). Also known by the synonyms benzene, ligroin, petroleum ether or naphtha.

- ▶ Group E atmospheres - Atmospheres containing metal dust, including aluminium, magnesium and their commercial alloys, and other metals of similarly hazardous characteristics.
- ▶ Group F atmospheres - Atmospheres containing carbon black, charcoal or coke dusts which have more than 8 percent total volatile material (carbon black per ASTM D1620, charcoal, coal and coke dust per ASTM D271) or atmospheres containing these dusts sensitized by other materials so that they represent an explosion hazard.
- ▶ Group G atmospheres - Atmospheres containing flour, starch, grain or combustible plastics or chemical dusts.

Note: Explanation of the above classes, divisions and atmospheres can be found in Article 500 of the United States National Electrical Code.

Encryption

For organizations that value the confidentiality of their information, Tait can now offer our TP8100 portable radios fitted with Midian™ encryption modules.

There are two levels of encryption depending on your customer's requirements:

- ▶ voice inversion encryption
 - protects against casual listeners and is cost-effective
- ▶ rolling code / frequency-hopping encryption
 - protects against more determined listeners

Applications

From a small company's competitive advantage through essential government information, we can now offer an encryption solution suitable for many different types of companies.

- ▶ Public and private safety, Law enforcement, Government department, Security company, Service provider, Health service, Event management, Commercial business, Security company, Service provider & Media.

Specifications

Encryption modules can be fitted to TP8100 portable radios either when the product is first built, or as a simple upgrade to existing equipment provided the radio was purchased 'encryption ready'.

Tait can provide consultation and system design to ensure the complete integration of your encryption solution. For specifications on encryption module types, please see the encryption white paper, under the documentation section of the encryption resource CD.

Important

The sale of certain encryption products is subject to export controls. It is imperative that you consult with your local L3Harris Representative prior to offering any encryption product to a customer.

Encryption Type

For organizations that require confidentiality of their information, Tait offers TP8100 portable radios fitted with Midian™ encryption modules. These can be fitted at all frequencies. Please contact your Representative who will help you with an encryption solution.

Types of encryption offered by Tait

There are two levels of Encryption depending on the requirements;

1. Voice Inversion Encryption which protects against casual listeners, and
2. Rolling Code / Frequency Hopping Encryption which protects against more determined listeners.

FEATURES	MIDIAN™ TVS-2
Encryption method	Hopping
Hopping rate	6-12/Sec
OTAP	No
Codes available	Trillions
Codes selectable	4
Coded/Clear TX	Manual select
Coded/Clear RX	Automatic
Inter-operability	-
Current drain	9Ma
CTCSS supported	Yes

FEATURES	MIDIAN™ TVS-2
Selcall	Yes
FFSK	Yes
Radio Enable/Disable	No
Change Encrypt codes	Yes
ANI	Yes
Emergency	Yes
Status	Yes
Change ANI/Group/Fleet	Yes
Force Coded/Clear	Yes

Frequently Asked Questions

What does a Tait encryption unit look like?

Tait encryption units are small circuit modules that fit inside our radios, and change the way speech is heard - garbling the transmitted audio, and reconstructing the received audio. Externally it is not evident that encryption is fitted to a radio.

How does the encrypted audio sound without a decrypter?

It still has the fluctuating volume of a speech signal, but like a totally foreign language with completely different phonetics - totally incomprehensible.

How easy is it to understand when decrypted?

There are some background noises but the main intelligibility of the speech is largely unaffected.

Do I need to replace all my radios?

Not necessarily. Your existing Tait radios may be able to be fitted with encryption.

Encryption Questionnaire

Encryption is a highly technical business. This questionnaire has been designed to help determine the system aspects of any encryption sale, and how they affect the equipment and services needed in order to ensure a satisfactory solution for your company and Tait. We ask that you complete this questionnaire before any orders are placed so that Tait can help fit you with the best possible solution. Please contact your L3Harris Representative for further information.

► **Company Name:** _____ **Name:** _____
 ► **Contact Email:** _____ **Contact phone:** _____

1. Who do you wish to protect your voice communications from?

- ☐ Casual listener
☐ Technically equipped listener
☐ Highly technical and determined eavesdropper

2. How many portable radios will require encryption in this application? Total number: _____

3. Will all radios require encryption functionality?

- ☐ Full fleet ☐ Partial fleet

4. Are all conversations to be encrypted or only a selection?

5. Are all radios assigned to individuals or available from a pool resource?

6. Are radio users to be responsible for enabling/disabling encryption or is the encryption module required to process this automatically?

7. Do the radios need to have a selection of encryption codes available or just one code?

8. If multiple encryption codes are required, are these to be available to the radio user via the radio user interface, or controlled via a central dispatcher?

9. Is the customer a current user of voice encryption? If yes, what is the type of encryption currently being used? Please specify brand and level of encryption.

10. What type of radio network (Conventional, Single-site MPT Trunked, Multi-site MPT Trunked) is being utilized in this application by these users? Please describe.

11. What other signalling will be used on this system (e.g. DTMF, PSTN, etc.)?

12. Does the radio use ANI and if so, pre- or post-PTT?

13. Is CTCSS/DCS used, and if so, at what hertz/code?

14. Please describe which assignable key will support encryption. Enable/disable and if it is a short or long press.

15. Who will be responsible for implementing the encryption solution (e.g. setting audio levels, etc.)

16. What audio accessories, if any, are to be used with the terminal equipment (e.g. speaker mics, headsets, etc.)?

17. Who will be responsible for training the end user?

18. What level of encryption is required?

- ☐ Midian™ TVS-2 TAIT
☐ Encryption ready

Intrinsically Safe Accessories

ITEM CODE	DESCRIPTION
Battery	
T03-20011-AAAA	TP81 Battery – Li-Ion 1880mAh IS

Non-Incendive Accessories

ITEM CODE	DESCRIPTION
Battery	
T03-24011-AAAA	TP8100 Battery - NI FM Li-Ion 1880mAh
T03-24011-ABAA	TP8100 Battery -Li-Ion 1800mAh complete with Belt Clip

Audio Accessories

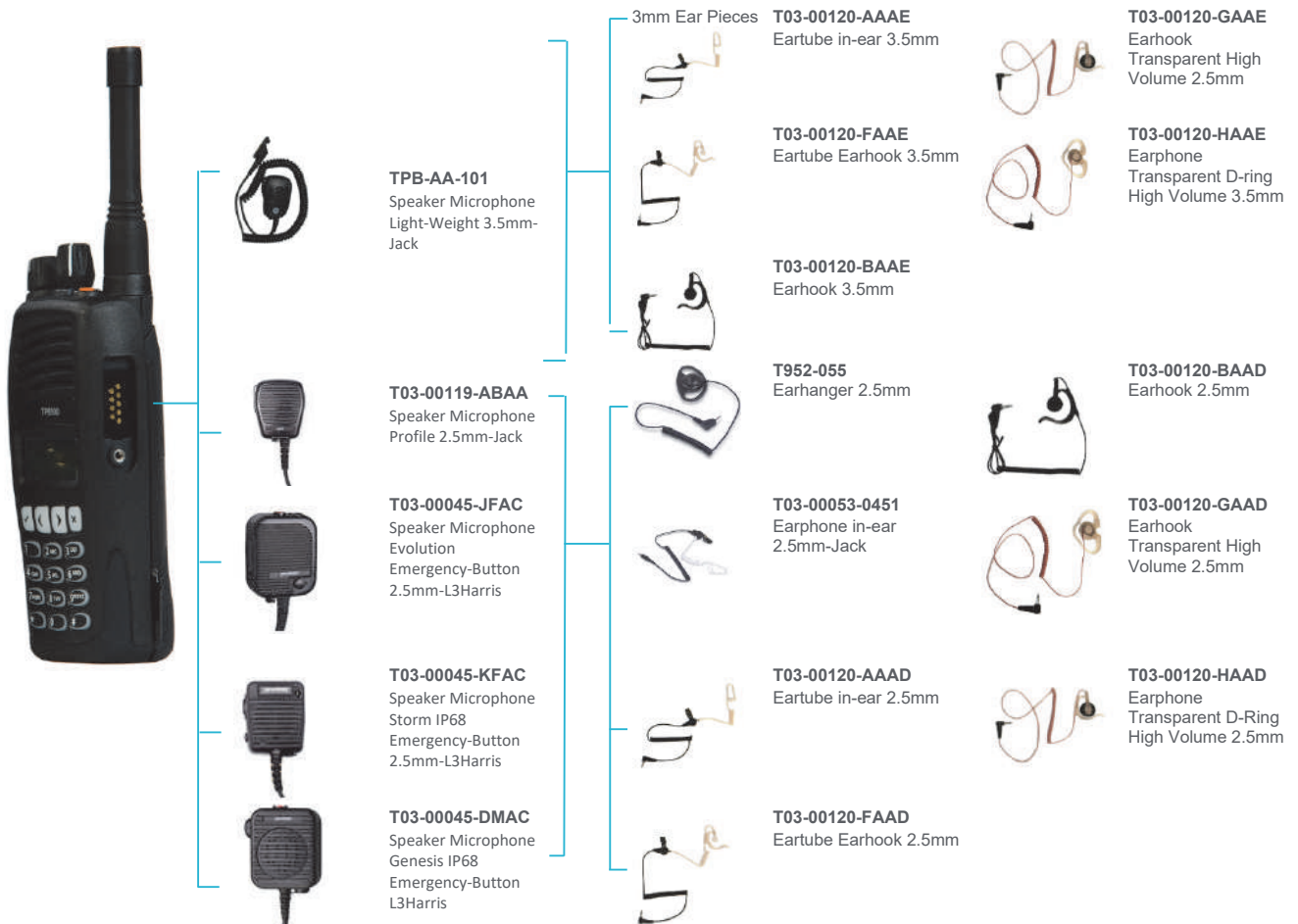
Please contact your L3Harris customer support representative if you require an audio accessory that is not shown here.

ITEM CODE	DESCRIPTION	
Speaker Microphones		
T03-00045-ERAA	TP81/93/94 Speaker Microphone Light-Weight 3.5mm-Jack	
T03-00045-FRAA	TP81/93/94 Speaker Microphone Medium-Weight 3.5mm-Jack	
T03-00119-ABAA	TP81 Speaker Microphone Profile 2.5mm-Jack	
T03-00045-GFAA	TP81 Speaker Microphone Evolution NI E-Button 2.5mm-Jack	
T03-00045-HFAA	TP81 Speaker Microphone Storm IP68 NI E-Button 2.5mm-Jack	
T03-00045-JFAC	TP81/93/94 Speaker Microphone Evolution Emergency-Button 2.5mm L3Harris	
T03-00045-KFAC	TP81/93/94 Speaker Microphone Storm IP68 Emergency-Button 2.5mm L3Harris	
T03-00045-DMAC	TP81/93/94 Speaker Microphone Genesis IP68 Emergency-Button L3Harris	
T03-00045-LSAA	TP81/93/94 Speaker Microphone C-C500 Emergency-Button Quick-Release-Jack	
TPB-AA-101	TP81 Speaker Microphone Light-Weight 3.5mm-Jack	
T03-10119-AAAA	TP81 Speaker Microphone Evolution GPS Emergency Button 2.5mm-Jack	Requires custom radio firmware. Contact your L3Harris customer support representative
Ear Pieces		
T03-00053-0451	Earphone In-Ear 2.5mm	
T952-055	Earhanger 2.5mm	
T03-00047-CBAA	Covert Kit Earhanger Lapel-Mic-With-PTT	
T03-00047-BAAA	Covert Kit Eartube-In-Ear Lapel-Mic-With-PTT	
T03-00120-AAAD	Eartube In-Ear 2.5mm	
T03-00120-AAAE	Eartube In-Ear 3.5mm	
T03-00120-BAAD	Earhook 2.5mm	
T03-00120-BAAE	Earhook 3.5mm	
T03-00120-FAAD	Eartube Earhook 2.5mm	
T03-00120-FAAE	Eartube Earhook 3.5mm	
T03-00120-GAAD	Earhook Transparent Hi-Volume 2.5mm	
T03-00120-GAAE	Earhook Transparent Hi-Volume 3.5mm	
T03-00120-HAAD	Earphone Transparent D-Ring Hi-Volume 2.5mm	
T03-00120-HAAE	Earphone Transparent D-Ring Hi-Volume 3.5mm	
Adaptors		
T03-00119-XAAA	TP81 Accessory Adaptor Hirose-6-Pin	
T03-00119-XBAA	TP81 Accessory Adaptor 7.5mm	

Audio Accessories - Continued

ITEM CODE	DESCRIPTION	
Headsets		
T03-00046-EFAA	TP81/93/94 Headset Light-Weight Behind-Head Boom-Mic Finger-PTT	
T03-00046-FAAB	TP81/93/94 Headset Heavy-Duty Overhead L3Harris	
T03-00046-FEAB	TP81/93/94 Headset Heavy-Duty Behind-Head L3Harris	
T03-00046-GEAA	TP81/93/94 Headset Hurricane II Behind-Head	
TPA-AA-211	TP81/91 Headset Breeze Behind-Head Hirose-6-Pin	Require T03-00119-XAAA
T03-00120-EEBA	TP81/91 Headset Heavy-Duty Overhead Hirose-6-Pin	
Surveillance Kits		
TPB-AA-203	TP81 Covert Kit Earhook Lapel-Microphone-with-PTT	
T03-00047-BAAA	TP81/93/94 Covert Kit Eartube-In-Ear Lapel-Mic-With-PTT	
T03-00047-AAAA	TP81/93/94 2 Wire Surveillance Kit	
TPA-AA-213	TP81/91 3 Wire Surveillance Kit Hirose-6-Pin Beige	Require T03-00119-XAAA
TPA-AA-221	TP81/91 2 Wire Surveillance Kit Hirose-6-Pin Black	
Throat Microphones		
T03-00120-AFEG	TP81 Throat Microphone 7.5mm	Requires T03-00119-XBAA
Skull Microphone		
T03-00120-KGAA	TP81/91 Skull Microphone Hirose-6-Pin	Requires T03-00119-XAAA
Connector Kit		
TPB-AA-005	TP81 Accessory Connector Kit	
Replacement Parts		
TPA-AA-214	Earpiece Quick Disconnect Acoustic Tube - Set of 5	Replacement parts for T03-00047-AAAA, TPA-AA-213 & TPA-AA-221
TPA-AA-215	Flexible Open Ear Insert - Left Ear Small	
TPA-AA-216	Flexible Open Ear Insert - Left Ear Medium	
TPA-AA-217	Flexible Open Ear Insert - Left Ear Large	
TPA-AA-218	Flexible Open Ear Insert - Right Ear Small	
TPA-AA-219	Flexible Open Ear Insert - Right Ear Medium	
TPA-AA-220	Flexible Open Ear Insert - Right Ear Large	

Audio Accessories - Continued



Accessory	Part Number	Description
TPB-AA-101	Speaker Microphone	Light-Weight 3.5mm-Jack
T03-00119-ABAA	Speaker Microphone	Profile 2.5mm-Jack
T03-00045-JFAC	Speaker Microphone	Evolution Emergency-Button 2.5mm-L3Harris
T03-00045-KFAC	Speaker Microphone	Storm IP68 Emergency-Button 2.5mm-L3Harris
T03-00045-DMAC	Speaker Microphone	Genesis IP68 Emergency-Button L3Harris
3mm Ear Pieces	T03-00120-AAAE	Eartube in-ear 3.5mm
	T03-00120-FAAE	Eartube Earhook 3.5mm
	T03-00120-BAAE	Earhook 3.5mm
	T952-055	Earhanger 2.5mm
	T03-00053-0451	Earphone in-ear 2.5mm-Jack
	T03-00120-AAAD	Eartube in-ear 2.5mm
	T03-00120-FAAD	Eartube Earhook 2.5mm
	T03-00120-GAAE	Earhook Transparent High Volume 2.5mm
	T03-00120-HAAE	Earphone Transparent D-ring High Volume 3.5mm
	T03-00120-BAAD	Earhook 2.5mm
	T03-00120-GAAD	Earhook Transparent High Volume 2.5mm
	T03-00120-HAAD	Earphone Transparent D-Ring High Volume 2.5mm

Audio Accessories - Continued



Audio Accessories – Continued



T03-00119-XAAA
Accessory Adaptor Hirose-6-pin



TPA-AA-211
Headset Breeze Behind-Head Hirose-6-Pin



T03-00120-EEBA
Headset Heavy-Duty Overhead Hirose-6-Pin



TPA-AA-213
3 Wire Surveillance Kit Hirose-6-Pin Beige



TPA-AA-221
2 Wire Surveillance Kit Hirose-6-Pin Black

Many third party audio accessories with a Hirose-6-Pin male connector.



T03-00119-XBAA
Accessory Adaptor 7.5mm

Many third party audio accessories with a 7.5mm male connector.

Batteries & Chargers

ITEM CODE	DESCRIPTION	
Batteries		
T03-00011-AAAA	TP81/93/94 Battery - Standard Li-Ion 1880mAh	
T03-00011-CAAA	TP81/93/94 Battery - Performance Li-Ion 2400mAh	
Belt Clips		
TPA-CA-201	TP8/9 Belt Clip 55mm	
TPA-CA-208	TP8/9 Belt Clip Adaptor for 55mm Belt Clip	Requires TPA-CA-201
Chargers		
T03-00012-AAFA	TP81/93/94 Charger Single Fast Li-Ion no Plug Pack – L3Harris	
T03-00012-AEFA	TP81/93/94 Charger Single Fast Li-Ion US/CAN Plug Pack – L3Harris	
T03-00013-AADA	TP81/93/94 Charger Multi Li-Ion No Mains Cable	
T03-00013-AEDA	TP81/93/94 Charger Multi Li-Ion Wall Kit US/CAN Mains Cable – L3Harris	
T03-00014-AAAA	TP81/93/94 Vehicle Charger Battery Only	



T03-00011-AAAA
Standard Li-Ion
1880mAh Battery



T03-00012-AAFA
Charger Single Fast Li-Ion
no Plug Pack L3Harris



T03-00014-AAAA
TP81/93/94 Vehicle
Charger Battery Only

Antennas

ITEM CODE	DESCRIPTION
TPA-AN-034	TP8/9 Antenna 136-174MHz Helical
TPA-AN-001	TP8/9 Antenna 136-225MHz Helical Tuneable
TPA-AN-002	TP8/9 Antenna 136-151MHz Helical
TPA-AN-003	TP8/9 Antenna 150-162MHz Helical
TPA-AN-004	TP8/9 Antenna 162-174MHz Helical
TPA-AN-019	TP81 Antenna 340-390MHz Helical
TPA-AN-017	TP81 Antenna 350-400MHz Helical
TPA-AN-018	TP81 Antenna 350-400MHz ¼ Wave Whip
TPA-AN-013	TP8/9 Antenna 400-470MHz Helical
TPA-AN-011	TP8/9 Antenna 400-470MHz ¼ Wave Whip
TPA-AN-015	TP8/9 Antenna 450-520MHz Helical
TPA-AN-012	TP8/9 Antenna 450-520MHz ¼ Wave Whip
TPA-AN-028	TP8/9 Antenna 762-870MHz Helical
TPA-AN-022	TP8/9 Antenna 762-870MHz ½ Wave Whip
TPA-AN-024	TP81 Antenna 896-941MHz ¼ Wave Whip
TPA-AN-025	Antenna, 896-941M, ½ Wave Whip, TP8/TP9

TPA-AN-003

Antenna 150-162MHz
Helical


TPA-AN-004

Antenna 162-174MHz
Helical


TPA-AN-022

Antenna 762-870MHz
½ Wave Whip



Carry Cases

ITEM CODE	DESCRIPTION	
Heavy Duty Leather		
T03-00133-ABBA	TP81 Carry Case Heavy Duty Leather 4Key D-Clip Belt Loop	
T03-00133-ABCA	TP81 Carry Case Heavy Duty Leather 16Key D-Clip Belt Loop	
Soft Leather		
T03-00133-BABA	TP81 Carry Case Soft Leather 4Key Use Battery Belt Clip	
T03-00133-BACA	TP81 Carry Case Soft Leather 16Key Use Battery Belt Clip	
Nylon		
T03-00133-CBBA	TP81 Carry Case Nylon 4Key D-Stud Belt Loop	
T03-00133-CBCA	TP81 Carry Case Nylon 16Key D-Stud Belt Loop	
T03-00133-CCBA	TP81 Carry Case Nylon 4Key Belt Loop	
T03-00133-CCCA	TP81 Carry Case Nylon 16Key Belt Loop	
Accessories		
T03-00038-0034	TP8/9 Shoulder Strap for Carry Case Heavy Duty Leather	For use with T03-00133-ABBA & T03-00133-ABCA
TPA-CA-201	TP8/9 Belt Clip 55mm	
TPA-CA-208	TP8/9 Belt Clip Adaptor for 55mm Belt Clip	Requires TPA-CA-201
TPA-CA-206	TP81/91 Belt Loop for D-Clip 55mm	
TPA-CA-207	TP81/91 Belt Loop for D-Clip 75mm	
T03-00038-0022	TP8/9 Belt Loop for D-Stud 55mm	
T03-00038-0023	TP8/9 Spring Clip for D-Stud 40mm	



T03-00133-ABBA - Carry Case
Heavy Duty Leather 4Key D-Clip
Belt Loop



T03-00133-BACA - Carry Case
Soft Leather 16Key Use Battery Belt
Clip



T03-00133-CBBA - Carry Case
Nylon 4Key D-Stud Belt Loop



T03-00038-0034 - Shoulder Strap
For Carry Case Heavy Duty Leather



TPA-CA-201
Belt Clip
55mm



TPA-CA-208
Belt Clip Adaptor for
55mm Belt Clip



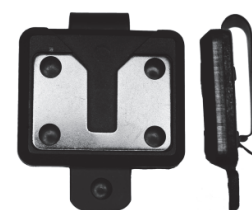
TPA-CA-206
Belt Loop for D-Clip
55mm



TPA-CA-207
Belt Loop for D-Clip
75mm



T03-00038-0022
Belt Loop for D-Stud 55mm



T03-00038-0023
Spring Clip for D-Stud 40mm

Programming & Service Accessories

ITEM CODE	DESCRIPTION
T03-00011-FAAA	TP81/93/94 DC Service Adaptor
T03-00040-0001	TP81/TP93/TP94 Service Kit – (Includes T03-00011-FAAA, T03-00118-0101, T03-00118-0202, T03-0118-0601, T03-00118-5301, TOPA-SV-006, TOPA-SV-024)
T03-00118-0101	TP81/93/94 Programming Adaptor Note: Included in the T03-00118-5101 programming kit
T03-00118-5101	TP81 Programming Kit
T03-00118-0601	USB to RJ11 Programming Cable
T03-00118-0201	TP81/93/94 Calibration Adaptor
T03-00118-0202	TP81/93/94 Calibration Low Pass Filter
T03-00118-5301	TP81 Assembly Tool Kit
T950-001	USB 1.1 to Serial DB9 Adaptor
TPA-SV-006	TP8/9/TM8/9/TB7 Radio Programming Lead - Serial PC to RJ12 Note: Included in the T03-00118-5101 programming kit
TOPA-SV-024	Terminals Calibration Box
TOPA-SV-006	TP RF Service Lead
T03-00118-5201	TP8100 Spares Kit TP8110 No Key Re Skin Kit
T03-00118-5202	TP8100 Spares Kit TP8115/35 4Key Reskin Kit
T03-00118-5203	TP8100 Spares Kit TP8120/40 16key Reskin Kit

TP8100

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

Analog Portable Radio - TP8100

TP8110 - 16 Channel Conventional

E/C	Item Code	Description	List Price
S	TP8110-B1CA	136-174M 1880mAh Hel 136-151M	\$ 583.00
S	TP8110-B1CB	136-174M 1880mAh Hel 150-162M	\$ 583.00
S	TP8110-B1CC	136-174M 1880mAh Hel 162-174M	\$ 583.00
S	TP8110-C0CT	174-225M 1880mAh Hel 136-225M	\$ 583.00
S	TP8110-G2CR	350-400M 1880mAh Whp 350-400M	\$ 583.00
S	TP8110-H5CE	400-470M 1880mAh Whp 400-470M	\$ 583.00
S	TP8110-H6CF	450-530M 1880mAh Whp 450-520M	\$ 583.00
S	TP8110-K6CM	806-870M 1880mAh Whp 762-870M	\$ 696.00
S	TP8110-B1CA-0D	136-174M 1880mAh Hel 136-151M USChgr	\$ 666.00
S	TP8110-B1CB-0D	136-174M 1880mAh Hel 150-162M USChgr	\$ 666.00
S	TP8110-B1CC-0D	136-174M 1880mAh Hel 162-174M USChgr	\$ 666.00
S	TP8110-C0CT-0D	174-225M 1880mAh Hel 136-225M USChgr	\$ 666.00
S	TP8110-G2CR-0D	350-400M 1880mAh Whp 350-400M USChgr	\$ 666.00
S	TP8110-H5CE-0D	400-470M 1880mAh Whp 400-470M USChgr	\$ 666.00
S	TP8110-H6CF-0D	450-530M 1880mAh Whp 450-520M USChgr	\$ 666.00
S	TP8110-K6CM-0D	806-870M 1880mAh Whp 762-870M USChgr	\$ 779.00

TP8115 - 128 Channel Conventional

E/C	Item Code	Description	List Price
S	TP8115-B1CA	136-174M 1880mAh Hel 136-151M	\$ 634.00
S	TP8115-B1CB	136-174M 1880mAh Hel 150-162M	\$ 634.00
S	TP8115-B1CC	136-174M 1880mAh Hel 162-174M	\$ 634.00
S	TP8115-C0CT	174-225M 1880mAh Hel 136-225M	\$ 634.00
S	TP8115-G2CR	350-400M 1880mAh Whp 350-400M	\$ 634.00
S	TP8115-H5CE	400-470M 1880mAh Whp 400-470M	\$ 634.00
S	TP8115-H6CF	450-530M 1880mAh Whp 450-520M	\$ 634.00
S	TP8115-K6CM	806-870M 1880mAh Whp 762-870M	\$ 747.00
S	TP8115-B1CA-0D	136-174M 1880mAh Hel 136-151M USChgr	\$ 717.00
S	TP8115-B1CB-0D	136-174M 1880mAh Hel 150-162M USChgr	\$ 717.00
S	TP8115-B1CC-0D	136-174M 1880mAh Hel 162-174M USChgr	\$ 717.00
S	TP8115-C0CT-0D	174-225M 1880mAh Hel 136-225M USChgr	\$ 717.00
S	TP8115-G2CR-0D	350-400M 1880mAh Whp 350-400M USChgr	\$ 717.00
S	TP8115-H5CE-0D	400-470M 1880mAh Whp 400-470M USChgr	\$ 717.00
S	TP8115-H6CF-0D	450-530M 1880mAh Whp 450-520M USChgr	\$ 717.00
S	TP8115-K6CM-0D	806-870M 1880mAh Whp 762-870M USChgr	\$ 830.00
S	TP8115-L3CP-0D	896-941M 1880mAh Whp 896-941M USChgr	\$ 830.00

TP8120 - 350 Channel Conventional

E/C	Item Code	Description	List Price
S	TP8120-B1CA	136-174M 1880mAh Hel 136-151M	\$ 713.00
S	TP8120-B1CB	136-174M 1880mAh Hel 150-162M	\$ 713.00
S	TP8120-B1CC	136-174M 1880mAh Hel 162-174M	\$ 713.00
S	TP8120-C0CT	174-225M 1880mAh Hel 136-225M	\$ 713.00
S	TP8120-G2CR	350-400M 1880mAh Whp 350-400M	\$ 713.00
S	TP8120-H5CE	400-470M 1880mAh Whp 400-470M	\$ 713.00
S	TP8120-H6CF	450-530M 1880mAh Whp 450-520M	\$ 713.00
S	TP8120-K6CM	806-870M 1880mAh Whp 762-870M	\$ 826.00
S	TP8120-B1CA-0D	136-174M 1880mAh Hel 136-151M USChgr	\$ 796.00
S	TP8120-B1CB-0D	136-174M 1880mAh Hel 150-162M USChgr	\$ 796.00
S	TP8120-B1CC-0D	136-174M 1880mAh Hel 162-174M USChgr	\$ 796.00
S	TP8120-C0CT-0D	174-225M 1880mAh Hel 136-225M USChgr	\$ 796.00
S	TP8120-G2CR-0D	350-400M 1880mAh Whp 350-400M USChgr	\$ 796.00
S	TP8120-H5CE-0D	400-470M 1880mAh Whp 400-470M USChgr	\$ 796.00
S	TP8120-H6CF-0D	450-530M 1880mAh Whp 450-520M USChgr	\$ 796.00
S	TP8120-K6CM-0D	806-870M 1880mAh Whp 762-870M USChgr	\$ 909.00
S	TP8120-L3CP-0D	896-941M 1880mAh Whp 896-941M USChgr	\$ 909.00

TP8135 - 100 Preset Call Trunked

E/C	Item Code	Description	List Price
S	TP8135-B1CA	136-174M 1880mAh Hel 136-151M	\$ 805.00
S	TP8135-B1CB	136-174M 1880mAh Hel 150-162M	\$ 805.00
S	TP8135-B1CC	136-174M 1880mAh Hel 162-174M	\$ 805.00
S	TP8135-C0CT	174-225M 1880mAh Hel 136-225M	\$ 805.00
S	TP8135-G2CR	350-400M 1880mAh Whp 350-400M	\$ 805.00
S	TP8135-H5CE	400-470M 1880mAh Whp 400-470M	\$ 805.00
S	TP8135-H6CF	450-530M 1880mAh Whp 450-520M	\$ 805.00
S	TP8135-K6CM	806-870M 1880mAh Whp 762-870M	\$ 918.00
S	TP8135-B1CA-0D	136-174M 1880mAh Hel 136-151M USChgr	\$ 888.00
S	TP8135-B1CB-0D	136-174M 1880mAh Hel 150-162M USChgr	\$ 888.00
S	TP8135-B1CC-0D	136-174M 1880mAh Hel 162-174M USChgr	\$ 888.00
S	TP8135-C0CT-0D	174-225M 1880mAh Hel 136-225M USChgr	\$ 888.00
S	TP8135-G2CR-0D	350-400M 1880mAh Whp 350-400M USChgr	\$ 888.00
S	TP8135-H5CE-0D	400-470M 1880mAh Whp 400-470M USChgr	\$ 888.00
S	TP8135-H6CF-0D	450-530M 1880mAh Whp 450-520M USChgr	\$ 888.00
S	TP8135-K6CM-0D	806-870M 1880mAh Whp 762-870M USChgr	\$ 1,001.00
S	TP8135-L3CP-0D	896-941M 1880mAh Whp 896-941M USChgr	\$ 1,001.00

TP8140 - 100 Preset Call Trunked

E/C	Item Code	Description	List Price
S	TP8140-B1CA	136-174M 1880mAh Hel 136-151M	\$ 883.00
S	TP8140-B1CB	136-174M 1880mAh Hel 150-162M	\$ 883.00
S	TP8140-B1CC	136-174M 1880mAh Hel 162-174M	\$ 883.00
S	TP8140-C0CT	174-225M 1880mAh Hel 136-225M	\$ 883.00
S	TP8140-G2CR	350-400M 1880mAh Whp 350-400M	\$ 883.00
S	TP8140-H5CE	400-470M 1880mAh Whp 400-470M	\$ 883.00
S	TP8140-H6CF	450-530M 1880mAh Whp 450-520M	\$ 883.00
S	TP8140-K6CM	806-870M 1880mAh Whp 762-870M	\$ 996.00
S	TP8140-B1CA-0D	136-174M 1880mAh Hel 136-151M USChgr	\$ 966.00
S	TP8140-B1CB-0D	136-174M 1880mAh Hel 150-162M USChgr	\$ 966.00
S	TP8140-B1CC-0D	136-174M 1880mAh Hel 162-174M USChgr	\$ 966.00
S	TP8140-C0CT-0D	174-225M 1880mAh Hel 136-225M USChgr	\$ 966.00
S	TP8140-G2CR-0D	350-400M 1880mAh Whp 350-400M USChgr	\$ 966.00
S	TP8140-H5CE-0D	400-470M 1880mAh Whp 400-470M USChgr	\$ 966.00
S	TP8140-H6CF-0D	450-530M 1880mAh Whp 450-520M USChgr	\$ 966.00
S	TP8140-K6CM-0D	806-870M 1880mAh Whp 762-870M USChgr	\$ 1,079.00
S	TP8140-L3CP-0D	896-941M 1880mAh Whp 896-941M USChgr	\$ 1,079.00

TP8110 - 16 Channel Non Incendive (NI) Conventional

E/C	Item Code	Description	List Price
S	TP8110-B1GA-70	NI 136-174M 1880mAh Hel 136-151M	\$ 695.00
S	TP8110-B1GB-70	NI 136-174M 1880mAh Hel 150-162M	\$ 695.00
S	TP8110-B1GC-70	NI 136-174M 1880mAh Hel 162-174M	\$ 695.00
S	TP8110-C0GT-70	NI 174-225M 1880mAh Hel 136-225M	\$ 695.00
S	TP8110-G2GR-70	NI 350-700M 1880mAh Whp 350-700M	\$ 695.00
S	TP8110-H5GE-70	NI 400-770M 1880mAh Whp 400-770M	\$ 695.00
S	TP8110-H6GF-70	NI 450-530M 1880mAh Whp 450-520M	\$ 695.00
S	TP8110-K6GM-70	NI 806-870M 1880mAh Whp 762-870M	\$ 808.00
S	TP8110-L3GP-70	NI 896-941M 1880mAh Whp 896-941M	\$ 808.00
S	TP8110-B1GA-7D	NI 136-174M 1880mAh Hel 136-151M USChgr	\$ 778.00
S	TP8110-B1GB-7D	NI 136-174M 1880mAh Hel 150-162M USChgr	\$ 778.00
S	TP8110-B1GC-7D	NI 136-174M 1880mAh Hel 162-174M USChgr	\$ 778.00
S	TP8110-G2GR-7D	NI 174-225M 1880mAh Hel 136-225M USChgr	\$ 778.00
S	TP8110-G2GR-7D	NI 350-700M 1880mAh Whp 350-700M USChgr	\$ 778.00
S	TP8110-H5GE-7D	NI 400-770M 1880mAh Whp 400-770M USChgr	\$ 778.00
S	TP8110-H6GF-7D	NI 450-530M 1880mAh Whp 450-520M USChgr	\$ 778.00
S	TP8110-K6GM-7D	NI 806-870M 1880mAh Whp 762-870M USChgr	\$ 891.00
S	TP8110-L3GP-7D	NI 896-941M 1880mAh Whp 896-941M USChgr	\$ 891.00

TP8115 - 128 Channel Non Incendive (NI) Conventional

E/C	Item Code	Description	List Price
S	TP8115-B1GA-70	NI 136-174M 1880mAh Hel 136-151M	\$ 745.00
S	TP8115-B1GB-70	NI 136-174M 1880mAh Hel 150-162M	\$ 745.00
S	TP8115-B1GC-70	NI 136-174M 1880mAh Hel 162-174M	\$ 745.00
S	TP8115-C0GT-70	NI 174-225M 1880mAh Hel 136-225M	\$ 745.00
S	TP8115-G2GR-70	NI 350-700M 1880mAh Whp 350-700M	\$ 745.00
S	TP8115-H5GE-70	NI 400-770M 1880mAh Whp 400-770M	\$ 745.00
S	TP8115-H6GF-70	NI 450-530M 1880mAh Whp 450-520M	\$ 745.00
S	TP8115-K6GM-70	NI 806-870M 1880mAh Whp 762-870M	\$ 858.00
S	TP8115-L3GP-70	NI 896-941M 1880mAh Whp 896-941M	\$ 858.00
S	TP8115-B1GA-7D	NI 136-174M 1880mAh Hel 136-151M USChgr	\$ 828.00
S	TP8115-B1GB-7D	NI 136-174M 1880mAh Hel 150-162M USChgr	\$ 828.00
S	TP8115-B1GC-7D	NI 136-174M 1880mAh Hel 162-174M USChgr	\$ 828.00
S	TP8115-C0GT-7D	NI 174-225M 1880mAh Hel 136-225M USChgr	\$ 828.00
S	TP8115-G2GR-7D	NI 350-700M 1880mAh Whp 350-700M USChgr	\$ 828.00
S	TP8115-H5GE-7D	NI 400-770M 1880mAh Whp 400-770M USChgr	\$ 828.00
S	TP8115-H6GF-7D	NI 450-530M 1880mAh Whp 450-520M USChgr	\$ 828.00
S	TP8115-K6GM-7D	NI 806-870M 1880mAh Whp 762-870M USChgr	\$ 941.00
S	TP8115-L3GP-7D	NI 896-941M 1880mAh Whp 896-941M USChgr	\$ 941.00

TP8120 - 350 Channel Non Incendive (NI) Conventional

E/C	Item Code	Description	List Price
S	TP8120-B1GA-70	NI 136-174M 1880mAh Hel 136-151M	\$ 824.00
S	TP8120-B1GB-70	NI 136-174M 1880mAh Hel 150-162M	\$ 824.00
S	TP8120-B1GC-70	NI 136-174M 1880mAh Hel 162-174M	\$ 824.00
S	TP8120-C0GT-70	NI 174-225M 1880mAh Hel 136-225M	\$ 824.00
S	TP8120-G2GR-70	NI 350-700M 1880mAh Whp 350-700M	\$ 824.00
S	TP8120-H5GE-70	NI 400-770M 1880mAh Whp 400-770M	\$ 824.00
S	TP8120-H6GF-70	NI 450-530M 1880mAh Whp 450-520M	\$ 824.00
S	TP8120-K6GM-70	NI 806-870M 1880mAh Whp 762-870M	\$ 937.00
S	TP8120-L3GP-70	NI 896-941M 1880mAh Whp 896-941M	\$ 937.00
S	TP8120-B1GA-7D	NI 136-174M 1880mAh Hel 136-151M USChgr	\$ 907.00
S	TP8120-B1GB-7D	NI 136-174M 1880mAh Hel 150-162M USChgr	\$ 907.00
S	TP8120-B1GC-7D	NI 136-174M 1880mAh Hel 162-174M USChgr	\$ 907.00
S	TP8120-C0GT-7D	NI 174-225M 1880mAh Hel 136-225M USChgr	\$ 907.00
S	TP8120-G2GR-7D	NI 350-700M 1880mAh Whp 350-700M USChgr	\$ 907.00
S	TP8120-H5GE-7D	NI 400-770M 1880mAh Whp 400-770M USChgr	\$ 907.00
S	TP8120-H6GF-7D	NI 450-530M 1880mAh Whp 450-520M USChgr	\$ 907.00
S	TP8120-K6GM-7D	NI 806-870M 1880mAh Whp 762-870M USChgr	\$ 1,020.00
S	TP8120-L3GP-7D	NI 896-941M 1880mAh Whp 896-941M USChgr	\$ 1,020.00

TP8140 - 100 Preset Call Non Incendive (NI) Trunked

E/C	Item Code	Description	List Price
S	TP8140-B1GA-70	NI 136-174M 1880mAh Hel 136-151M	\$ 995.00
S	TP8140-B1GB-70	NI 136-174M 1880mAh Hel 150-162M	\$ 995.00
S	TP8140-B1GC-70	NI 136-174M 1880mAh Hel 162-174M	\$ 995.00
S	TP8140-C0GT-70	NI 174-225M 1880mAh Hel 136-225M	\$ 995.00
S	TP8140-G2GR-70	NI 350-700M 1880mAh Whp 350-700M	\$ 995.00
S	TP8140-H5GE-70	NI 400-770M 1880mAh Whp 400-770M	\$ 995.00
S	TP8140-H6GF-70	NI 450-530M 1880mAh Whp 450-520M	\$ 995.00
S	TP8140-K6GM-70	NI 806-870M 1880mAh Whp 762-870M	\$ 1,108.00
S	TP8140-L3GP-70	NI 896-941M 1880mAh Whp 762-870M	\$ 1,108.00
S	TP8140-B1GA-7D	NI 136-174M 1880mAh Hel 136-151M USChgr	\$ 1,078.00
S	TP8140-B1GB-7D	NI 136-174M 1880mAh Hel 150-162M USChgr	\$ 1,078.00
S	TP8140-B1GC-7D	NI 136-174M 1880mAh Hel 162-174M USChgr	\$ 1,078.00
S	TP8140-C0GT-7D	NI 174-225M 1880mAh Hel 136-225MUSChgr	\$ 1,078.00
S	TP8140-G2GR-7D	NI 350-700M 1880mAh Whp 350-700M USChgr	\$ 1,078.00
S	TP8140-H5GE-7D	NI 400-770M 1880mAh Whp 400-770M USChgr	\$ 1,078.00
S	TP8140-H6GF-7D	NI 450-530M 1880mAh Whp 450-520M USChgr	\$ 1,078.00
S	TP8140-K6GM-7D	NI 806-870M 1880mAh Whp 762-870M USChgr	\$ 1,191.00
S	TP8140-L3GP-7D	NI 896-941M 1880mAh Whp 762-870M USChgr	\$ 1,191.00

Analog Portable Radio - Accessories

TP8100 - Audio Accessories - Speaker Mics

E/C	Item Code	Description	List Price
S	T03-00119-ABAA	TP81 Speaker Mic Profile 2.5mm Jack	\$ 162.00
S	T03-00045-JFAC	SpkrMic, Evolution, E-Button, 2.5mm	\$ 186.00
S	T03-00045-KFAC	SpkrMic, Storm, E-Button, 2.5mm, IP68	\$ 215.00
S	T03-00045-DMAC	Spkr Mic Genesis IP68 E-Button	\$ 279.00
S	TPB-AA-101	TP8 Speaker Mic Light Weight 3.5mm Jack	\$ 65.00
S	T03-00045-ERAA	Speaker Mic Light-Weight 3.5mm-Jack	\$ 63.00
S	T03-00045-FRAA	Spkr Mic Medium-Weight 3.5mm Jack	\$ 67.00

TP8100 - Audio Accessories - Ear Pieces

E/C	Item Code	Description	List Price
S	T03-00053-0451	Earphone In-Ear 2.5mm	\$ 69.00
S	TPA-AA-214	Earpiece Quick Disconnect Acoustic x5	\$ 57.00
S	TPA-AA-215	Flexi Open Ear Insert - Left Ear Small	\$ 17.00
S	TPA-AA-216	Flexi Open Ear Insert - Left Ear Medium	\$ 17.00
S	TPA-AA-217	Flexi Open Ear Insert - Left Ear Large	\$ 17.00
S	TPA-AA-218	Flexi Open Ear Insert - Right Ear Small	\$ 17.00
S	TPA-AA-219	Flexi Open Ear Insert - Right Ear Medium	\$ 17.00
S	TPA-AA-220	Flexi Open Ear Insert - Right Ear Large	\$ 17.00
S	T952-055	Earhanger 2.5mm	\$ 39.00
S	T03-00120-AAAD	Eartube In-Ear 2.5mm	\$ 20.00
S	T03-00120-AAAE	Eartube In-Ear 3.5mm	\$ 20.00
S	T03-00120-BAAD	Earhook 2.5mm	\$ 12.00
S	T03-00120-BAAE	Earhook 3.5mm	\$ 12.00
S	T03-00120-FAAD	Eartube Earhook 2.5mm	\$ 20.00
S	T03-00120-FAAE	Eartube Earhook 3.5mm	\$ 20.00
S	T03-00120-GAAD	Earhook Transparent Hi-Volume 2.5mm	\$ 12.00
S	T03-00120-GAAE	Earhook Transparent Hi-Volume 3.5mm	\$ 12.00
S	T03-00120-HAAD	Earphone Transparent D-Ring Hi-Vol 2.5mm	\$ 12.00
S	T03-00120-HAAE	Earphone Transparent D-Ring Hi-Vol 3.5mm	\$ 12.00

TP8100 - Audio Accessories - Adaptors

E/C	Item Code	Description	List Price
S	T03-00119-XAAA	TP81 Accessory Adaptor Hirose-6-Pin	\$ 157.00
S	T03-00119-XBAA	TP81 Accessory Adaptor 7.5mm	\$ 52.00

TP8100 - Audio Accessories - Headsets

E/C	Item Code	Description	List Price
S	T03-00046-EFAA	Headset L-Wt Behind-Hd Boom-Mic Fngr-PTT	\$ 76.00
S	T03-00120-EEBA	Headset Heavy-Duty Overhead Hirose 6Pin	\$ 524.00

TP8100 - Audio Accessories - Surveillance Kits

E/C	Item Code	Description	List Price
S	TPB-AA-203	TP8 2Wire Ephone A-Ear Lpl Mic/Palm PTT	\$ 62.00
S	T03-00047-AAAA	Kit, 2-Wire Surveillance	\$ 233.00
S	T03-00047-BAAA	Covert Kit Eartube In Ear Lapel Mic PTT	\$ 54.00
S	T03-00047-CBAA	Covert Kit Earhanger Lapel Mic With PTT	\$ 54.00

TP8100 - Audio Accessories - Connector Kit

E/C	Item Code	Description	List Price
S	TPB-AA-005	TP8 Accessory Connector Kit	\$ 34.00

TP8100 - Batteries

E/C	Item Code	Description	List Price
For additional Battery sales outside of a package please allow a minimum of 8 weeks for delivery			
S	T03-00011-AAAA	Battery, Li-Ion 1880mAh	\$ 93.00
S	T03-00011-CAAA	Battery, Li-Ion 2400mAh	\$ 135.00
S	T03-20011-AAAA	TP8100 Battery - IS FM Li-Ion 1880mAh	\$ 157.00
S	T03-24011-AAAA	TP8100 Battery - NI FM Li-Ion 1880mAh	\$ 157.00

TP8100 - Belt Clips

E/C	Item Code	Description	List Price
S	TPA-CA-201	TP8/9 Belt Clip 55mm	\$ 11.00
S	TPA-CA-208	Belt Clip Adaptor for 55mm Clip	\$ 16.00

TP8100 - Chargers

E/C	Item Code	Description	List Price
S	T03-00012-AAAA	Charger Single Fast Li-Ion No Plug Pack	\$ 66.00
S	T03-00012-AEFA	Charger, Single Bay, Li-Ion w/Plug Pack	\$ 83.00
S	T03-00013-AAAA	Charger Multi Li-Ion No Mains Cable	\$ 695.00
S	T03-00013-AADA	Charger Multi Li-Ion No Cable	\$ 765.00
S	T03-00013-AEDA	Charger, Multi Bay, Li-Ion w/Cable	\$ 805.00

TP8100 - Antennas

E/C	Item Code	Description	List Price
S	TPA-AN-001	TP8/9 Antenna 136-225MHz Hel Tunable	\$ 22.00
S	TPA-AN-002	Antenna, 136-151MHz Hel	\$ 22.00
S	TPA-AN-003	Antenna, 150-162MHz Hel	\$ 22.00
S	TPA-AN-004	Antenna, 162-174MHz Hel	\$ 22.00
S	TPA-AN-011	Antenna, 400-470MHz, Whip	\$ 22.00
S	TPA-AN-012	Antenna, 450-520MHz, Whip	\$ 22.00
S	TPA-AN-013	Antenna, 400-470MHz, Hel	\$ 22.00
S	TPA-AN-015	Antenna, 450-520MHz, Hel	\$ 22.00
S	TPA-AN-017	TP81 Antenna 350-400MHz Hel	\$ 22.00
S	TPA-AN-018	TP81 Antenna 350-400MHz Whp	\$ 22.00
S	TPA-AN-019	TP81 Antenna 340-390MHz Hel	\$ 22.00
S	TPA-AN-022	Antenna, 762-870MHz, 1/2 Wave Whip	\$ 22.00
S	TPA-AN-024	TP81 Antenna 896-941MHz 1/4 Wave Whp	\$ 22.00
S	TPA-AN-025	Antenna, 896-941M, 1/2 Wave Whip TP8/TP9	\$ 22.00

TP8100 - Carry Case - Heavy Duty Leather

E/C	Item Code	Description	List Price
S	T03-00133-ABBA	Case Hvy Duty Leather 4Key D-Clip Loop	\$ 66.00
S	T03-00133-ABCA	Case Hvy Duty Leather 16Key D-Clip Loop	\$ 66.00

TP8100 - Carry Case - Soft Leather

E/C	Item Code	Description	List Price
S	T03-00133-BABA	Case Soft Leather 4Key Use Batt Clip	\$ 35.00
S	T03-00133-BACA	Case Soft Leather 16Key Use Batt Clip	\$ 35.00

TP8100 - Carry Case - Nylon

E/C	Item Code	Description	List Price
S	T03-00133-CBBA	TP8 Case Nylon 4Key D-Stud Belt Loop	\$ 54.00
S	T03-00133-CBCA	TP8 Case Nylon 16Key D-Stud Belt Loop	\$ 54.00
S	T03-00133-CCBA	TP8 Carry Case Nylon 4Key Belt Loop	\$ 38.00
S	T03-00133-CCCA	TP8 Carry Case Nylon 16Key Belt Loop	\$ 38.00

TP8100 - Carry Case - Accessories

E/C	Item Code	Description	List Price
S	T03-00038-0034	Shoulder Strap Case Heavy Duty Leather	\$ 36.00
S	TPA-CA-201	TP8/9 Belt Clip 55mm	\$ 11.00
S	TPA-CA-208	TP8/9 Belt Clip Adaptor for 55mm Clip	\$ 16.00
S	TPA-CA-206	TP8/9 Belt Loop for D-Clip 55mm	\$ 20.00
S	TPA-CA-207	TP8/9 Belt Loop for D-Clip 75mm	\$ 20.00
S	T03-00038-0022	TP8/9 Belt Loop for D-Stud 55mm	\$ 20.00
S	T03-00038-0023	TP8/9 Spring Clip for D-Stud 40mm	\$ 20.00

TP8100 - Re-Skinning Kits

S	T03-00118-5201	TP8110 Spares Kit No Key Re Skin Kit	\$ 78.00
S	T03-00118-5202	TP8115/35 Spares Kit 4Key Reskin Kit	\$ 81.00
S	T03-00118-5203	TP8120/40 Spares Kit 16key Reskin Kit	\$ 87.00

TP8100 - Programming & Service Kits

E/C	Item Code	Description	List Price
S	T950-001	USB 1.1 to Serial DB9 Adaptor	\$ 86.00
S	T03-00011-FAAA	TP81/93/94 DC Service Adaptor	\$ 103.00
S	T03-00118-0101	TP81/93/94 Programming Adaptor	\$ 45.00
S	T03-00118-5101	TP8100 Programming Kit	\$ 104.00
S	T03-00118-5301	TP8100 Assembly Tool Kit	\$ 292.00
S	TPA-SV-006	Radio Programming Lead Serial PC to RJ12	\$ 69.00
S	TOPA-SV-024	Terminals Calibration Box	\$ 235.00

TN9500

All prices are subject to the then current L3Harris Corporation Communications System Domestic Standard Conditions of Sale and are subject to change without notice.

Master Price List (USD)

Company Proprietary and Confidential

TN9500

TN9500 - UnifyNetwork Gateway

E/C	Item Code	Description	List Price
S	TN95101511BA000000	TN9500 Inter-Network Gateway w/o UV	\$ 20,080.00
S	TN95100521BA000000	TN9500 Inter-Network Gateway High AC	\$ 39,834.00
S	TN95100522BA000000	ING Gtwy MPT-DMR H-Lvl 48V DC	\$ 39,834.00
S	TN95100021AB000000	Server TN9500, Inter-Ntwk, High Level, AC	\$ 32,648.00
S	TN95100022AB000000	Server TN9500, Inter-Ntwk, High Level, DC	\$ 32,648.00

TN9500 - UnifyNetwork Licenses

E/C	Item Code	Description	List Price
S	TNAS701	MPT-IP/DMR Inter Node Connect license	\$ 6,161.00
S	TNAS702	MPT Classic Inter Node Connect license	\$ 3,728.00
S	TNAS703	TN9500 HA Redundancy	\$ 3,191.00
S	TNAS704	Transcoding block of 1 license	\$ 2,186.00
S	TNAS705	Transcoding block of 20 licenses	\$ 34,965.00

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