PowerTrunk-T HTT-500
TETRA Portable Land Mobile Radio

For digital trunked UHF and 800 MHz LMR networks

The PowerTrunk-T HTT-500 portable radio is all about coverage, audio quality and reliability.

It packs a unique 3 watts of RF output* for improved coverage, 1 watt of audio, 18+ hours of battery power and is set to go with the latest features including Bluetooth® connectivity, a WAP browser, GPS, and a man-down alarm capability. The HTT-500 is solid, tough and durable, yet small and light-weight. This top-of-the-line, powerful, reliable and user-friendly radio comes with an intuitive, graphical color interface that is easy to learn and efficient in an emergency.

Coverage, audio and power when you need it
- Adaptive 3 watt RF output power* comes standard in all bands except 800 MHz which has 1.8 watts:
    - Provides significantly more coverage than other TETRA portable radios on the market — a critical capability especially for indoor situations.
    - Output power automatically adjusts from 15dBm to 35dBm (3 watts) to ensure reliable coverage as the user's location changes — while optimizing battery power.
    - Emergency calls are always automatically sent at full power.
- The 1 watt audio output power provides higher volume and crisp audio quality, a critical advantage in emergency situations.
- A high-capacity lithium-polymer battery comes standard with every unit:
    - Lasts over 18 hours (1800 mAh).
    - Light and thin form factor.

Security features you can depend on
- Man-down feature, essential for emergency situations, comes standard in all configurations.
- Optional built-in GPS sends location information periodically by time or distance and upon request. Supports the ETSI LIP protocol for faster position refreshing.
- Exceeds standard security requirements: FIPS 140-2 Level 3-oriented tamper-proof E2EE module, support for up to eight algorithms including AES 256 and OTAK functionality.

Easy to use, durable and light-weight
- Large, high-quality 1.8" color TFT display.
- Intuitive user interface is similar to a cell phone.
- WAP browser for customized data applications.
- Weighs less than 12.5 ounces yet feels solid in the hand.
- Exceeds TETRA environmental standards.
- Optional built-in Bluetooth® provides connectivity to wireless audio and data devices.

* To comply with FCC emission masks and occupied bandwidth limits in the US, the HTT-500 is offered in two versions: (1) ETSI standard TETRA for use specifically in FCC-authorized bands, and (2) FCC Part 90 certified TETRA-Interoperable D-LMR (TI D-LMR) for bands with more restrictive limits in which ETSI standard TETRA is not authorized. Both versions are fully interoperable and compliant with official TETRA Interoperability Profile (TIP) certification requirements.

TETRA

PowerTrunk$_T$

Powerful • Secure • Reliable • Scalable

Technical Characteristics

General

- Dimensions (H x W x D): 144.2 x 59 x 37mm/5.68 x 2.32 x 1.46 in.
- Weight: approx 350 g/12.34 oz.
- Audio output: 1W
- Battery life 5/5/90 (1W): >18h
- Battery life 5/5/90 (3W): >14h
- Display: Graphical color TFT 1.8" (128 x 160 pixels, 65,000 colors)

RF features

- TX output power: from 15mW to 3W (Class 3)
- FCC 0.2 version: 2W (1W in 800 MHz)
- Class A receiver
- Static sensitivity: -112dBm minimum
- Dynamic sensitivity: -103dBm minimum

Frequency bands

- 380-430 MHz
- 410-470 MHz
- 806-870 MHz

Services Supported

Mobility management

- Registration / deregistration
- Cell reselection (handover)
- Air interface migration and multiple manual network selection

Security services

- Authentication (terminal and mutual)
- Air interface encryption security class:
  - Class 1: Clear
  - Class 2: SCK
  - Class 3: DCK
- Algorithms: TEA1, TEA2 and TEA3
- OTAR (Over The Air Rekeying)
- Enable/disable (temporary and permanent)
- End-to-end encryption

Voice services

- Individual half-duplex calls with direct / hook signaling
- Individual duplex calls
- Group call: 1050 talk groups (for TMO / DMO or both)
- Broadcast call
- Phone calls (PSTN / PABX). DTMF transmission
- Emergency call (type destination address programmable)

Supplementary services include:

- Dynamic group number assignment
- Late entry
- Calling line identification
- Talking party identification
- Priority call
- Preemptive priority call
- Ambience listening
- Call authorized by dispatcher
- Transmit inhibit (TxI)
- Call register

Data services include:

- Status to individual or group address
- SDS (Type 1, 2, 3 and 4) to individual or group address (with or without TL)
- Secondary control channel support (up to 3)
- Simultaneous status and SDS data in a voice call
- Circuit mode data
- Multi-slot packet data (up to 4 slots)
- Inbox of up to 15 status
- Inbox of up to 15 SDS
- 100 preprogrammed status
- Outbox up to 15 SDS
- WAP browser
- Enhanced PEI port

MMI languages

- English, Spanish, French and others (consult).

Multiple Configurations

- Basic
- GPS
- Bluetooth®
- GPS and Bluetooth®
- End-to-end encryption and GPS

Environmental

General

- Operating temperature range: -30ºC to +60ºC / -20ºF to +160ºF
- TETRA conformance testing: ETSI EN 300 394-1:
   -20ºC to +55ºC / -5ºF to +130ºF
- Storage temperature: -40ºC to +85ºC / -40ºF +185ºF
- Dust and water: IP54

Classification according to ETSI EN 300 019 standard (equivalent to MIL-STD 810 C, D, E, F)

- Storage. Class 1.3. Non-weather protected storage locations (Class T1.3E)
- Transportation. Class 2.3. Public transportation (Class T2.3)
- Portable and non-stationary use:
  - Environmental Class 7.3. Partly weather protected and non-weather protected locations
  - Mechanical Class 7M3

Accessories

Chargers

- Desktop charger (1 slot + 1 battery)
- Desktop charger (5 slots + 5 batteries)
- Travel charger
- Vehicle lighter charger
- Standard lithium-polymer battery 1800 mAh

Audio

- Remote speaker microphone
- Ear hanger for remote speaker microphone
- Standard ear hanger
- Handsfree kit
- Semi-covert kit
- Covert kit

Others

- Helical and 1/4 wave antennas
- Nylon case with belt clip or belt swivel
- Leather case with belt swivel

PowerTrunk

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