



HTT-800

Tactical HF Radio

- Advanced SDR architecture.
- Direct RF sampling technology, full frequency receiving architecture.
- Up to 38.4kbps data transmission.
- Safest radio with FH and advanced encryption.
- Supports vocoding voice of 600 bps, 1200 bps, and 2400 bps to meet the requirements in various communication scenarios.



20W Manpack Radio



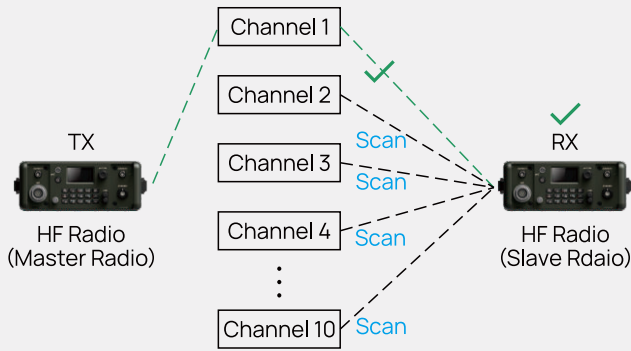
125W Vehicular/Fixed Radio



1000W Fixed Radio

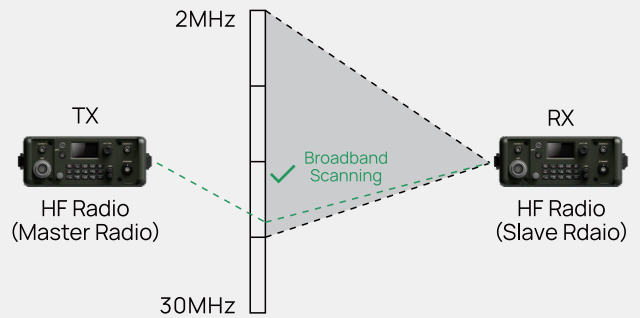
Advanced Waveforms

2G/3G ALE



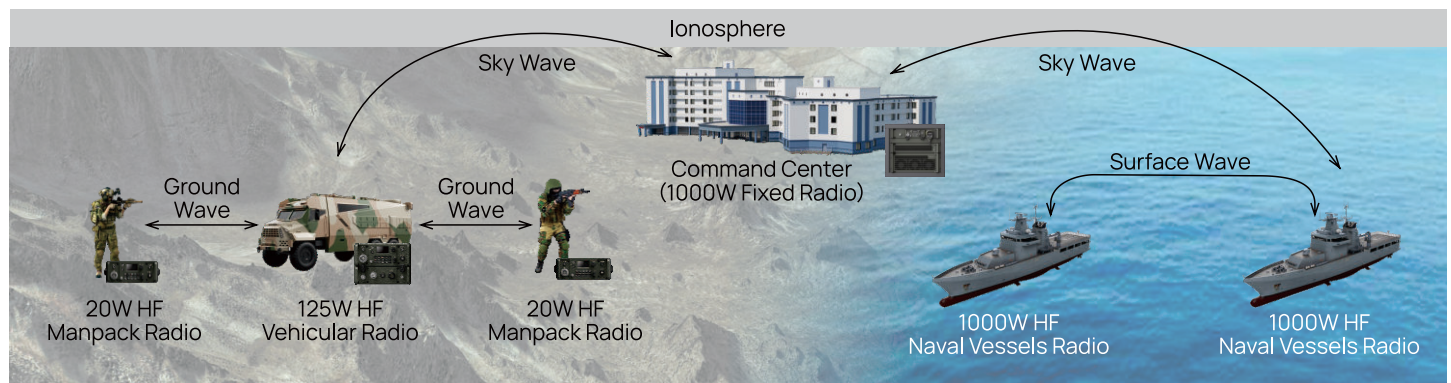
2G ALE adopts short-wavelength adaptive communication technology to continuously evaluate the transmission quality on the channel during communication. This facilitates communication on a channel with better transmission conditions, ensuring better pass rates and transmission capabilities. 3G ALE has a great change in automatic link establishment and service compared with the 2G ALE mode. To be specific, the 3G mode features improved connectivity, rich service, and frequency hopping mode for anti-interference.

Fast Frequency Selection (FFS)



Through advanced technology such as broadband reception and direct RF sampling, it can automatically and quickly select the best frequency for communication to ensure timely and reliable transmission of combat information under various situations. FFS has higher efficiency and speed over 2G and 3G ALE.

Application



In HF communication, the communication within more than ten kilometers is achieved through the ground wave, within 200 kilometers through the surface wave, and within thousands of kilometers through reflection by ionosphere. The combination of fixed and mobile networks makes interference more difficult, which enables HF communications to be more reliable and efficient.

Highlights

Communication Ability

- **Fast Frequency Selection (FFS)**
FFS is a HF communication waveform proprietary to Teltronic. The frequency selection efficiency has been improved by nearly 1,000 times, ensuring timely and reliable transmission of combat information in various situations; there is no need to rely on experienced HF communication operators.
- **Reception Adaptive**
HTT-800 has reception adaptive functions, including rate adaptive, digital voice/analog voice adaptive and frequency hopping/fixed frequency adaptive, which can improve business efficiency.
- **High-definition Voice**
HTT-800 supports 600bps, 1200bps, 2400bps vocoding, meeting the communication needs of various scenarios; using advanced voice codec technology and digital error correction technology, even in a noisy environment, you can still get a clear voice.
- **Data Transmission**
HTT-800 has a built-in modem for data transmission, and the rate can reach 38.4kbps.
- **Low-speed Packet**
When the channel quality is poor, low-speed packet can be transmitted without establishing a link.
- **Voice Message**
HTT-800 supports voice message sending and receiving function.
- **CW Automatic Packet**
In CW mode, software algorithm can be used to realize automatic sending and receiving of hand-key packet.
- **GPS**
GPS build-in module enables team members to track their individual soldier position location information (PLI), enabling situational awareness.

Communication Security (COMSEC)

- **Encryption**
HTT-800 provides AES 256 bits software encryption for both voice and data communication, as well as supports customized encryption board.
- **Key Filling**
Key fill gun offers 6 functions: confidential information storage, networking configurations injection, encryption parameters backup, identity authentication, key erasing execution and also reserves key storage ability even if in the event of power loss.
- **Key Erasing**
HTT-800 affords diverse methods to prevent the secured information disclosure through erasing the key manually or automatically.

Reliability

- **Waterproof**
Manpack radio has the improved waterproof capability of submersion in 2 meters water for up to 4 hours.
- **Ruggedized**
HTT-800 and its accessories meet MIL-STD-810G requirements, ensure product performance and communication stability and reliability during wartime and exercise.
- **Temperature**
Manpack radio can work normally from -40°C to 65°C.
- **Electromagnetic Compatibility**
Complied with MIL-STD-461F.

Usability

- OLED screen provide high brightness, wider viewing range, and readable capability under direct sunlight.
- Remote control function can make users be able to control the radios remotely through Ethernet or field-cable. Radio remote control, with sites and call separation, flexible deployment and higher security.
- Modular design has simple structure and reasonable layout, which is conducive to product upgrade. Rectangular interface blind plug-in mode, convenient for module assembling and replacement.
- Shortcut key operation with related functions, no need to enter the configuration menu, simplified operation.

Power Amplifier



125W Power Amplifier



1000W Power Amplifier

125W power amplifier and 1000W power amplifier can be equipped with manpack radio and used as a base station, which is convenient for vehicle installation and fixed installation. The maximum power can reach 1000W. With vehicle antenna or three-wire broadband antenna, it can effectively expand the communication distance.

Automatic Antenna Tuner



The automatic antenna tuner is a product that adapts to the power amplifier. When used with the power amplifier, it can ensure that the power amplifier can be connected to different types of antennas to expand the communication distance of the HF system and improve the communication reliability.

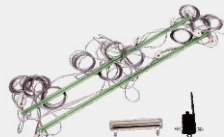
Accessories



15m Slant Antenna



3m Whip Antenna



Broadband Antenna



Dipole Antenna



NVIS Antenna



12Ah Battery



Palm Microphone with Display



Tactical Headset



Handset



Moss Key

Specification

General	
Frequency Range	1.60000MHz~30MHz
Channels	1000
Frequency Stability	0.5ppm
Channel Spacing	10Hz
Modulation	USB/LSB/CW/AM
RF Impedance	50 Ω
Power	Manpack Nominal Voltage: 14.4V, Range: 12.8~16.8V Vehicular/fixed(125W): 24(19.2~32.4)VDC Fixed(1000W): 380V \pm 10%V AC
Data Interface	K/RS232/Ethernet/USB
Dimension (W×H×D, mm)	Manpack: 190×75×367(\pm 5mm) (with battery) Vehicular/Fixed(125W): 190×135×367(\pm 5mm) Fixed(1000W): 9U, 19inches
Weight	Manpack: \leq 6kg(with battery) Vehicular/Fixed(125W): \leq 11kg Fixed(1000W): \leq 100kg
Service Type	Analog, Digital, Message, Low-speed packet, Key-telegraph, Data transfer
COMSEC	AES 256 Bits Software Encryption, Encryption Board Interface

Transmitter	
Output Power	Manpack: 5/10/20W Vehicular/Fixed(125W): 20/50/125W Fixed(1000W): 1000W
Audio Modulation	\leq 3dB
Receiver	
Sensitivity	Manpack: -114dBm(SINAD=12dB) Vehicular/Fixed: -113dBm(SINAD=12dB)
Audio Distortion	\leq 3%
ECCM	
ECCM	FH
FH Rate	5hops/s、10hops/s、20hops/s
Environmental	
Storage Temperature	Manpack: -50°C~70°C Vehicular/Fixed(125W): -50°C~65°C Fixed(1000W): -50°C~65°C
Operating Temperature	Manpack: -40°C~65°C (Low temp. Battery) Vehicular/Fixed(125W): -40°C~55°C Fixed(1000W): -40°C~65°C
Environmental Conditions	MIL-STD-810G



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