

SpearNet Team Member Radio

The smallest wideband data radio providing advanced wireless, ad-hoc networking.



ITT

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SpearNet radio, the newest of the ITT family of tactical communications systems, is optimized for digital, network-centric communication. SpearNet is a powerful communication tool that provides a seamless, self-healing ad-hoc networking and multi-hop routing capability, allowing SpearNet to multiply force effectiveness.

Key Features

- Smallest wideband networking radio
- 19.61 cm H x 7.59 cm W x 4.75 cm D (7.72" H x 2.99" W x 1.87" - 1.20" D)
- < 700g (1.5 lbs) including battery
- Secure voice, data and video
- Advanced, wireless, ad-hoc networking
- AES-256 bit encryption

Functions

- Embedded GPS (CA)
- Standard interfaces
 - Ethernet
 - USB host and device
 - RS-232
 - Bluetooth (optional)
- 8 channel pre-sets
 - Dual PTTs
 - 16 talk groups

Performance

- Operating bands
 - 1.2 - 1.4 GHz tunable
 - Other bands available at customer request
- Direct Sequence Spread Spectrum for optimal urban operation
- Maximum 6 Mbps transmission data burst rate, 1.5 Mbps sustained
 - Multi-channel CSMA/CA channel access algorithm
 - Adaptive Transmission Protocol (ATP) continuously adapts data rate and coding to link conditions
- Networking
 - Self-organizing, self-healing
 - Multi-hop inter-networking
 - Tactical LAN on the move (no server required)

Transmitter Characteristics

- Adaptive transmit power up to 600 mW transmit power
- Nominal 1 km typical range, demonstrated at 6 km with elevated antenna
- Extended range capable with directional antenna

System Components

- SpearNet Radio
- Headset/Microphone (required)
- Communication and GPS Antenna
- Radio Access Unit (required)
- Battery and battery charger
- Data interfaces
- GPS Antennas
- Carrying Pouch
- Carrying Harnesses (Vests)

Ancillaries

- Battery chargers
 - 6 Bay
 - 1 Bay
 - Vehicular charger
 - Solar charger
- Battery
- GPS antenna
 - Mounted
 - Dismounted
- Headsets with RAU
 - Temco
 - Peltor
 - Racal
- Software
 - SA Mapping
 - Network Management
 - AES Key Management



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Communications Systems

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