



Link 16 TacNet[™] Tactical Radio

Today's wars are being waged against an unconventional enemy in challenging environments. The exchange of critical real time information among air, land and sea forces is more important than ever. This increased situational awareness saves lives and enhances mission effectiveness.

The Link 16 TacNet™ Tactical Radio (TTR) by DLS delivers proven Link 16 capability to meet both U.S. armed forces and coalition warfighter requirements for a SWAP-C, small, no-cooling required, low-cost Link 16 situational awareness radio to combat 21st century threats. TTR is the smallest size, qualified standalone Link 16 terminal available on the market today.

Built on a solid foundation of combat proven data link systems technology from the world's leading Link 16 manufacturer, the TTR was designed to operate up to 71°C with no cooling required. Smallest size and lack of cooling air make TTR the ideal small form factor solution for platforms that traditionally lacked Link 16 access, such as UAV/UAS, Tactical Air Control Party (TACP), mobile and transportable ground stations and gateways, rotary wing, pods, small maritime assets and transport aircraft. The TTR has been integrated with numerous existing host platforms including products from TCG, Engility, Rockwell Collins, DLS, General Dynamics, and Boeing, among others. With transmit capability of 1/50/90watts, the TTR offers the best range as well as the best anti jam performance among all small form factor Link 16 terminals.

This low cost, SWAP-C solution was developed, tested and qualified to MIL-STD- 6016D, STANAG 5516 and DOD 4650.1- R1 requirements ensuring full interoperability across all platforms currently operating on the Link 16 network.

Performance characteristics

- Three selectable transmit power modes: 90W, 50W and 1W
- Time Slot Duty Factor (TSDF) modes: up to 100% TSDF
- Dual or single antenna TX and RX
- · Jam resistance and crypto secure
- 127 possible nets
- · Frequency remapping compliant
- · Extended sync endurance



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Terminal characteristics

Length	6.60 in (16.76 cm)
Width	4.96 in (12.60 cm)
Height	5.56 in (14.12 cm)
Weight	10.4 lbs (4.5 kg)
Volume	<182 in ³ (2,982.4 cm ³)
Input Power	28 VDC, MIL-STD-704
Cooling	Free convection cooled, no cold plates or fans required
Environmental compliance	MIL-STD-810F, MIL-STD-461E
Operating temperature	-40°C TO +71°C
Storage temperature	-55°C to +95°C
Altitude	-1,800 to +70,000 ft
	(-549 to +21,336 m)
Range	+200 nm (+370.4 km)

Growth capability

- Link 16 crypto modernization
- Enhanced throughput (ET)
- · Concurrent multi-netting
- Multi-channel capability
- · High power capability



Functional capabilities

- Interoperable with MIDS and JTIDS
- NATO interoperability
- Full Link 16 message capability to include Precise Participant Location and Identification (PPLI) messages (MIL-STD-6061D)
- · Embedded, highly accurate geodetic navigation
- Adaptive host interface processing
- · Applicable to all military services
- Relay
- CVSD and LPC-10 voice
- 1553 and Ethernet I/O
- SCA architecture
- · Co-site mitigation interfaces

Benefits to end user

- Situational awareness now available for all tactical edge users
- Improved mission effectiveness
- · See your tactical objective
- Reduced pilot workload
- · Real time shared sensor information
- Improved mission tactics
- · Reduced duplicate assignments or targets
- Joint Link 16 interoperability with NATO and coalition forces
- Significant size reduction compared to MIDS
- Significant weight reduction compared to MIDS
- Reduced input power and power consumption compared to MIDS
- · No cooling requirements
- · Significant cost savings over MIDS



