

MIDS JTRS TERMINAL

Multifunctional Information Distribution System Joint Tactical Radio System

The MIDS JTRS terminal from L3Harris combines the network-centric communications capability of tomorrow with the real-time operating picture of today—all in one unit. This four-channel software-programmable radio delivers advanced Link 16 capabilities and TACAN functionality, as well as three channels for growth.

PRODUCT DESCRIPTION

The terminal's dedicated Link 16 channel ensures full interoperability with MIDS-LVT and Small Form Factor (SFF) Link 16 terminals to exchange tactical information in real-time.

By retaining the existing MIDS-LVT form factor and interfaces, the MIDS JTRS terminal facilitates integration into platforms that already host MIDS-LVT. This approach enables existing LVT users to take advantage of the benefits of upgrading to MIDS JTRS, which includes TACAN and enhanced Link 16 capabilities—Concurrent Multi-Netting (CMN), Concurrent Contention Receive (CCR), Enhanced Throughput (ET), Frequency Remapping (FR), and Cryptographic Modernization—while minimizing platform integration costs. MIDS JTRS provides today's warfighters with a common tactical picture via Link 16, and three software-defined channels for future growth.





Plug-and-Play Installation and Interoperability

KEY FEATURES

- CMN/CCR enables 4x receive capacity while maintaining interoperability
- > Enhanced throughput boosts Link 16 data rate
- > Full Frequency Remapping permits banded operation
- Crypto modernized with reprogrammable security
- Simultaneous cryptographicallyisolated 4-channel operation
- > Software programmable
- > Same form factor as MIDS-LVT for reduced integration costs
- > Fully interoperable with MIDS-LVT and SFF Link 16 terminals
- > Full access to Link 16 real-time situational awareness and Command & Control (C2)

ADVANCED CAPABILITIES FOR THE WARFIGHTER TODAY

MIDS JTRS introduces technology enhancements to supercharge the warfighter's situational awareness and Command and Control (C2) capabilities without impacting overall network capacity. The terminal can receive multiple messages in the same time slot, increasing the receive capacity by four times that of a legacy Link 16 terminal. Concurrent Multi-Net (CMN-4) enables multiple messages to be received within a time slot using four different net numbers. For example, warfighters will be able to monitor four zones of surveillance. The operator also gets much faster updates when multiple messages with the same net number are received within a time slot from users at different ranges (e.g. fighter-to-fighter) using Concurrent Contention Receive (CCR).

The system's Enhanced Throughput mode boosts Link 16's protected data rate of 115 Kbps to over 1 Mbps. Frequency Remapping is also supported, enabling the warfighter to use banded Link 16 to avoid interference with other systems. With Crypto Modernization, MIDS JTRS implements new encryption algorithms to ensure secure coalition communications across the network.

GROWTH TO SUPPORT THE WARFIGHTER TOMORROW

With three universal channels available, L3Harris' MIDS JTRS terminal is ready for legacy as well as the next generation of IP-based tactical networking. The terminal architecture accommodates modern transceivers to support advanced networking waveforms to deliver greater network capacity and much lower latency for sensor and processing sharing.



SPECIFICATIONS

PERFORMANCE CHARACTERISTICS

> Link 16 messaging: TADIL J per MIL-STD-6016

> Transmit spectral performance: Greater than -60 dBc in

1030/1090 MHz bands

> Output transmit power: 1, 25 or 200 Watts + HPA

interface

> Host interfaces: MIL-STD-1553,

ethernet, and voice

> L-16 data throughput: 26.8 through 1102 kbps TADIL

J coded, free text variable format or enhanced throughput

> Keyfill: DS-101

> Voice capability: L-16: 2.4 kbps LPC-10

and 16 kbps CVSD

> TACAN capability: Air-to-ground, air-to-air

> Programmable channel: 3 Channels

PHYSICAL CHARACTERISTICS

> Main terminal and RFA: 7.62" (w) x 7.5" (h) x 13.5" (d)

(19.35 cm x 19.05 cm x 34.29 cm)

> Power Supply (PS): 7.62" (w) x 2.252" (h) x 13.46" (d)

(19.35 x 5.72 x 34.19 cm)

> Volume: 1002.5 in3 (16,428.03 cc)

> Weight:

- MIDS JTRS RT LRU 50.6 lb (22.95 Kg)

- MIDS JTRS PS LRU 14 lb (6.49 Kg)

POWER AND COOLING

> Power source alternatives: 115 VAC (400 Hz) 3 Phase

or ± 140 VDC

> Power consumption: 0% TSDF 150 Watts,

70% TSDF 350 Watts

> Cooling: External Forced Air

