

# MINI-T 2x TRANSCEIVER

Low SWaP, high data-rate modem meeting critical data link requirements for ground, air or shipboard configurations

The L3Harris Mini-T 2x Transceiver is a small, network-ready, fully capable high-rate data link terminal enhanced for wideband mobile networking. Our Mini-T 2x provides waveforms and capabilities specifically designed for use in commercial and military applications worldwide. It can be configured as either a surface or airborne terminal on the fly, and can be matched with a variety of antenna and power amplifier options to meet virtually any application that calls for wideband data throughput. In addition to the capabilities of its predecessor, the Mini-Ti(x), the Mini-T 2x adds dual Gigabit Ethernet interfaces, HD video, X/Ku-Band LOS, high data rates up to 135 Mbps and many other capabilities.

### **PRODUCT DESCRIPTION**

The L3Harris Mini-T 2x Transceiver provides low-cost, lightweight, wideband data link capability adaptable to a wide variety of applications. It delivers real-time, full-motion video for situational awareness, targeting, battle damage assessment, surveillance, convoy operations and other situations where eyes-on-target are required. With standard network interfaces and a built-in wideband router, the Mini-T 2x is fully network-ready and is a powerful gateway into the net-centric battlespace. The Mini-T 2x Transceiver provides enhanced air and ground coordination, which shortens targeting time for critical operations. The small, lightweight and rugged Mini-T 2x Transceiver delivers proven international interoperability.





## Mission Ready—Small, Interoperable, Wideband

### **KEY FEATURES**

- Dual-band, full-duplex LOS capability
- Symmetric and asymmetric data rates up to 135 Mbps
- Mission-selectable RFE and antenna; flexibility to meet system requirements
- Supports both omnidirectional and directional antenna systems
- Control GUI, including router configuration, pre-mission configuration and video display
- > MPEG-2, H.264, 1080p HD video

#### APPLICATIONS

- > Manned ISR aircraft
- > Mobile systems
- > Ground-based Tactical Operations Center (TOC)

#### SPECIFICATIONS

## PERFORMANCE CHARACTERISTICS

#### Transmit and Receive Bands

> X-Band:

- 9.75 GHz to 9.95 GHz
- 10.14 GHz to 10.44 GHz
- > Ku-Band:
  - 14.40 GHz to 14.83 GHz
  - 15.15 GHz to 15.35 GHz
- > Data Rates

## **Encryption Options**

- > AES\*
- > External

## Networking

- > Layer 2, 3 switching/routing
- > Supports OSPF, RIP and others
- > Supports multi-cast
- > 802.1Q VLANs
- > NAT available at 45 Mbps and below
- > DHCP server/client

## External or User Interfaces

- > User I/O:
  - Ethernet (Qty 2; 10/100/1000)
  - RS-232 (Qty 2; Console, GPS)
  - RS-422
  - Audio (Full-duplex CDL voice)
  - USB 2.0

- > Sensor Interface Options:
  - RS-170 (NTSC and PAL), HD-SDI
  - MPEG-2, H.264, HD 1080p encode and decode
  - Antenna, RFE I/O:
  - Ethernet (10/100)
  - RS-232
  - RS-485 (antenna control)
  - Omni or directional antenna
- > Other:
  - RF in (X and Ku)
  - RF out (X and Ku)
  - 10<sup>-8</sup> bit error rate

## PHYSICAL CHARACTERISTICS

### SWaP

- > Size: 14.2 cm (w) x 6.1 cm (h) x 24.1 cm (l) 5.6" (w) x 2.4" (h) x 9.5" (l)
- > Weight: 2.7 kg (5.5 lb.)
- > Power: 28 VDC, 102 W max

## Environmental

- > Temperature:
  - Operating: -40 °C to +60 °C (46 CFM)
  - Non-Operating: -40 °C to +85 °C
- > Altitude: -154 m to 21,336 m (-500 ft. to 70,000 ft.)
- > Humidity: 0 to 100%, condensing
- > Shock: 20 G, 11 msec (terminal sawtooth peak)
- > Vibration: MIL-STD-810F, method 514.5
- > EMI: MIL-STD-461G
- > Salt Fog: MIL-STD-810F

\*AES may be export controlled

#### Mini-T 2x Transceiver

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1025 W. NASA Boulevard Melbourne, FL 32919 t 833 537 6837 CSW.Products@L3Harris.com