



NET-CENTRIC DATA LINK SOLUTIONS



The E-MMT was specifically designed to be interoperable with many intelligence, surveillance and reconnaissance (ISR) systems.

E-MMT

EXPORTABLE MULTIBAND MINIATURE TRANSCEIVER

Cubic's Exportable Multiband Miniature Transceiver (E-MMT) is a small, lightweight, integrated digital data link transceiver providing voice, data and imagery information for both airborne and surface applications. It is capable of receiving and transmitting video and telemetry data across UHF, L, S, C, and Ku frequency bands, while maintaining a very low size, weight and power footprint. The E-MMT can receive and transmit standard CDL (STANAG-7085) compliant waveforms as well as other waveforms. The E-MMT was specifically designed to be interoperable with many intelligence, surveillance and reconnaissance (ISR) systems.

E-MMT ISR Applications

- Manned Aircraft
- Unmanned Air Vehicles
- Mobile Ground Vehicles
- Maritime Vessels
- Remote Viewing Terminals



Key Features

- | | |
|---|---|
| ■ Small size, weight and power footprint for installation flexibility | → Compatible with short range tactical UAVs and larger manned and unmanned vehicles |
| ■ Multi-band reception and transmission (UHF/L/S/C/Ku) | → Enables operation anywhere in the world, with most existing data links |
| ■ Transmit and receive data rates up to 45 Mbps | → Provides Ethernet channel for voice, data, and videos |
| ■ Integrated video compression/decompression engine | → Simplifies integration and reduces required equipment |
| ■ Web-browser Graphical User Interface (GUI) or open IP control | → Eases human or machine control |

Benefits

Physical Characteristics

- | | |
|----------|--------------------|
| • Size | 5.4" x 3.5" x 1.2" |
| • Weight | 1.7 lbs |
| • Power | 24 W (10-33 VDC) |

Reliability

- MTBF > 6,000 hours

Environmental

- | | |
|-------------------------|-------------------|
| • Vibration & shock | MIL-STD-810 |
| • EMI/EMC | MIL-STD-461 |
| • Operating temperature | -40°C to +55°C |
| • Operating altitude | up to 50,000 feet |

Performance Characteristics

RF Transmit and Receive

- | | |
|-------------------------|---------------------------------|
| • Ku-band | 14.40-14.83 and 15.15-15.35 GHz |
| • C-band | 4.40-4.95 and 5.25-5.85 GHz |
| • S-band | 2.20-2.50 GHz |
| • L-band | 1625-1850 MHz |
| • UHF | 400-470 MHz |
| • Other bands available | |

- Standard Metadata
 - Brite Star
 - MISB 601.1
 - MISB 601.2

Waveforms and Data Rates

- Full-duplex symmetric or asymmetric standard CDL (STANAG-7085) at data rates of 200 kbps to 44.73 Mbps

Video Processing

- MPEG-2
- H.264/MPEG-4 AVC/Part 10
- H.261 (by request)
- Motion JPEG (by request)
- JPEG 2000 (by request)

Data Interfaces

- Ethernet
 - IPv4, IPv6 (by request)
 - Unicast or Multicast
 - Router (by request)
- RS-232/422
- Analog RS-170 video in/out (NTSC and PAL)
- Analog Audio in/out
- Control Interfaces
 - STANAG 4586
 - SNMP terminal control
 - Web browser GUI control

Encryption

- Advanced Encryption Standard (AES)
- Support (by request)