NET-CENTRIC DATA LINK SOLUTIONS

Cubic’s Multiband Miniature Transceiver (MMT) is a small, affordable, programmable radio that can operate in UHF, L, S, C, and Ku RF bands. MMT provides the basis for two-way transport of video and IP data between airborne platforms and land or maritime users.

Paired with suitable antennas and amplifiers, MMT can provide reliable, secure communication links over hundreds of miles at data rates up to 44.73 Mbps. MMT is waveform programmable. It has been tested for interoperability with U.S. standard CDL and bandwidth-efficient CDL waveforms.

MMT can also be programmed with legacy and custom waveforms and can store more than a dozen, different, field-selectable waveform modes for even wider interoperability. MMT can operate with any CDL specification-compliant platform, including these examples:

AIRCRAFT
Shadow, Gray Eagle, Triton, Fire Scout, Predator, Reaper, unmanned vehicles; Apache, Kiowa, MH-60 AN/ARQ-59 Hawklink helicopters; and CDL-equipped targeting pods.

GROUND TERMINALS
AN/USQ-167 CDLS, AN/SRQ-4 Hawklink, Stinger, UGDT; Vortex, Rover, OSRVT, and Video Scout remote viewing terminals.

MMT runs CDL-standard and custom waveforms to interoperate with commercial data links and military intelligence, surveillance and reconnaissance systems.
### FEATURES

- Low required power and small size and weight footprint for installation flexibility.
- Multi-band reception and transmission (UHF/L/S/C/Ku).
- AES encryption; optional Type-1 (U.S. only).
- Integrated video compression/decompression
- Transmit and receive data rates up to 44.73 Mbps.
- Web-browser operator and SNMP machine-to-machine control.

### BENEFITS

- Compatible with short-range tactical UAVs and larger manned and unmanned vehicles.
- Enables operation anywhere in the world.
- Facilitates flexible, tested secure communications.
- Simplifies integration and further reduces terminal footprint.
- Provides high-capacity IP channels for voice, data and video.
- Eases human or machine control.

### Physical Characteristics

<table>
<thead>
<tr>
<th>Size</th>
<th>5.4” x 3.5” x 1.2”</th>
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<tbody>
<tr>
<td>Weight</td>
<td>1.7 lbs</td>
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<tr>
<td>Power</td>
<td>31-35 W (10-33 VDC)</td>
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<tr>
<td>Reliability</td>
<td>MTBF &gt; 10,000 hours</td>
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<thead>
<tr>
<th>Environmental</th>
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<tr>
<td>Vibration and shock</td>
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<tr>
<td>EMI/EMC</td>
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<tr>
<td>Operating temperature</td>
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<td>Operating altitude</td>
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| Performance Characteristics |

**RF Transmit and Receive**

- C-band: 4.00-6.00 GHz
- S-band: 2.00-2.50 GHz
- L-band: 1000-1999 MHz
- UHF: 400-470 MHz

**Standard CDL**

- Bandwidth Efficient (BE) CDL Rev B
- 466 ER
- Tactical 1.6, 3.2, 6.4
- VNW (planned for FY18)

**Video Processing**

- MPEG-2
- Metadata: Brite Star, MISB 601.1, MISB 601.2
- H.264/MPEG-4 AVC/Part 10

**Data Interfaces**

- Ethernet: IPv4; IPv6 available
- Unicast or multicast
- Router optional
- RS-232/422
- Analog RS-170 video in/out (NTSC and PAL)
- Analog audio in/out
- Control interfaces: STANAG 4586, Web GUI, Common Control Interface (SNMP)

**Encryption**

- Removable Type-1 module
- Advanced Encryption Standard