Features and Benefits

- **Low power requirement and small size and weight footprint for installation flexibility and compatibility 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**
- **AES & Type-1 encryption (U.S. only) facilitates flexible and tested secure communications**
- **Integrated video compression/ decompression simplifies integration and further reduces terminal footprint**
- **Transmit and receive data rates up to 45 Mbps provides high-capacity IP channels for voice, data and video**
- **Web-browser operator and SNMP machine-to-machine control eases human or machine control**

Multiband Miniature Transceiver (MMT)

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 45 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.

Multiband Miniature Transceiver (MMT)

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

Specifications

Physical Specifications	
Size	5.4" H x 3.5" W x 1.2" D
Weight	1.7 lbs
Power	28-32W (10-33 VDC)

Environmental Specifications	
Vibration and Shock	MIL-STD-810
EMI/EMC	MIL-STD-461
Operating Temperature	-40ºC to +71ºC (Case Temperature)
Operating Altitude	Up to 50,000 Feet

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

Waveforms	
Standard CDL	200 kbps to 45 Mbps
Bandwidth Efficient CDL (Modes 1-8, 101, and 104)	200 kbps to 45 Mbps
466 ER	200 kbps to 45 Mbps
Tactical 1.6, 3.2, 6.4	512 kbps to 45 Mbps
VNW	

RF Transmit and Receive	
Ku-band	14 - 16 GHz
C-band	4.40-6.00 GHz
S-band	2.00-2.50 GHz
L-band	1000-1999 MHz
UHF	400-470 MHz

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

Encryption
Removable Type-1 module
Advanced Encryption Standard

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