



MTM-203 Embedded Satellite Transceiver

U.S. Army photo courtesy of 25th Combat Aviation Brigade

Mobile Datacom | MTM-203

Comtech's MTM-203 is a miniaturized mobile satellite transceiver that incorporates key features of our MT-2011 and is ideal for integration in handheld devices used for satellite-based communications and applications with size and weight restrictions.

The MTM-203 combines compact design and unique functionality to provide integrators with a robust device that can easily be incorporated into other electronic devices. Its transceiver's primary function is to allow users and enable applications to send and receive messages via satellite. By using the internal GPS receiver, the MTM-203 provides location information on each message and transmits location information automatically.

Features

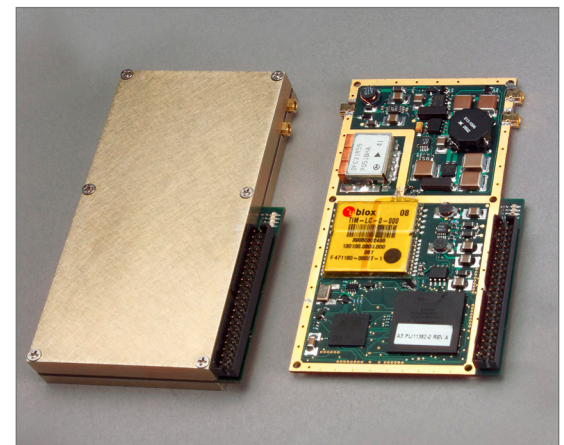
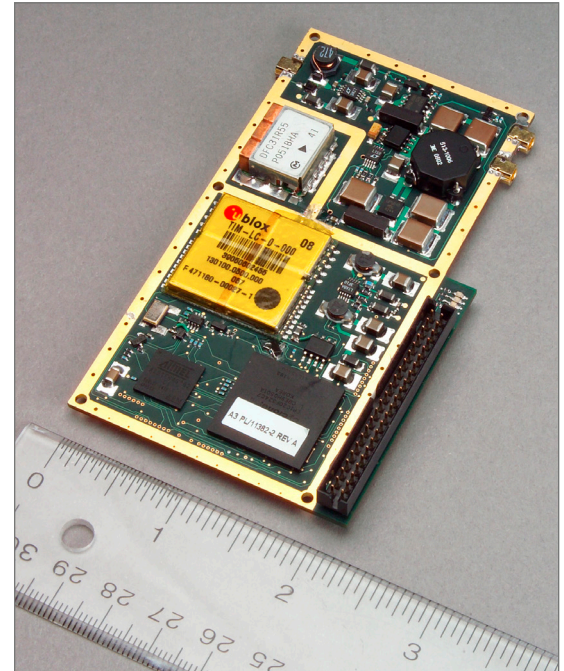
- Provides overload protection on receive channel to prevent LNA burn-out for large signals
- Allows for FPGA code loading so new waveforms can be uploaded after transceiver is deployed
- Advanced Forward Error Correction for burst data
- Position accuracy to 2.5m Circular Error Probability
- FIPS 140-2, Level 2 validated module
- FCC/ETSI compliant
- 16 channel GPS position—up to 4 updates per second
- AUX power, 4 I/O lines and IGN sense

Benefits

- Miniature, lightweight design
- Operates over multiple L-band satellites worldwide on fully encrypted packet data network
- Low power consumption mode
- Encrypted two-way data transmission
- Secure, near real-time over-the-horizon, on-the-move communications capability
- Low probability of intercept
- Low probability of detection
- Designed for integration into other electronic devices including covert devices, handheld computers and portable battery-powered equipment
- Allows dismounted user to maintain situational awareness and messaging connectivity worldwide with other mobile/terrestrial connected users

Specifications

Physical	
SIZE	Length 4" Width 2.3" Height 0.6"
WEIGHT	0.3 lbs
Environmental	
OPERATING TEMPERATURE	-40°C to +71°C
OPERATING CONDITIONS	100% relative humidity
ALTITUDE	0-20,000 feet operating and storage
SHOCK/VIBRATION	MIL-STD-810F compliant
FCC/ETSI COMPLIANT	Yes
Interface Port	
3.3V TTL serial	
Operational	
POWER CONSUMPTION	Transmit = 3.0 Amps @ 10VDC Input Receive = 0.3 Amps @ 10VDC Input
TRANSMIT POWER	<4 W
INPUT VOLTAGE RANGE	6.5VDC to 15VDC
MODULATION	Direct Sequence Spread Spectrum
Communication	
DATA PACKET LENGTHS	Up to 100 byte payload
TRANSMIT FREQUENCY	1610—1660.5 MHz
RECEIVE FREQUENCY	1525—1559 MHz
Data Rates Available	
FORWARD LINK	650 bps, 1.3 Kbps, 2.6 Kbps, 5.2 Kbps, 10.4 Kbps, 20.6 Kbps
RETURN LINK	650 bps, 1.3 Kbps, 2.6 Kbps
Antenna	
50 ohm—external LHC and RHC polarizations feeds	
Security	
FIPS 140-2, Level 2 validated module	
End-to-End Data Encryption	
Supports AES128, AES192, AES256	



About Comtech

Comtech Telecommunications Corp. (Nasdaq: CMTL) designs, develops, produces and markets innovative products, systems and services for advanced communications solutions. The Company sells products to a diverse customer base in the global commercial and government communications markets. For more information visit www.comtechtel.com.

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