



# ASDR Satellite Transceiver

DoD photo by Mass Communication Specialist 3rd Class (SW) James Turner, U.S. Navy/Released  
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## With You Then and Now!

Proven Force Tracking Solutions. Ready to Support Your SATCOM On-the-Move Missions!

### Key Features

- Capable of up to 235 Kbps
- Full duplex
- FCC/ETSI compliant
- Supports AES128, AES192, AES256
- FIPS 140-2 validated AES encryption
- Tested to MIL-STD 810F
- Tested to MIL-STD 461E
- MIL-STD 1275B Surge/Spike Power Projection Circuit

### Benefits

- Flexible data rates 600 bps to 235 Kbps
- Modular design supports voice, RFID, terrestrial, mesh upgrades
- Secure and reliable two-way messaging
- High data rate mode supports delivery of imagery on-the-move
- Phased array antenna maximizes signal acquisition, provides superior signal tracking and lock down to 5° of elevation
- Delivers high data rates & link margins for reliable operations
- Secure burst spread spectrum RF transmission
- Compatible with all L-band satellite constellations
- Supports RHCP and LHCP polarizations
- Low Probability of Intercept/Low Probability of Detection
- Over-the-air (OTAR) rekey and encryption key management

## Specifications ASDR Satellite Transceiver

PHYSICAL	
SIZE	Length 9" Width 9" Height 6"
WEIGHT	5 lbs
ENVIRONMENTAL	
OPERATING TEMPERATURE	-40°C to +71°C
OPERATING CONDITIONS	100% relative humidity
ALTITUDE	0-35,000 feet operating
INTERFACE PORT	Supports RS-422 and Ethernet data protocols
OPERATIONAL	
POWER CONSUMPTION	Transmit = 2A @ 28VDC Receive = 500 mA @ 28VDC
TRANSMIT POWER	<5 W
INPUT VOLTAGE RANGE	10.8VDC to 33VDC
MODULATION	BPSK and QPSK
COMMUNICATION	
FULL DUPLEX	Yes
DATA PACKET LENGTHS	Up to 1500 Byte in Ethernet mode and up to 100 Byte using RS-422
TRANSMIT FREQUENCY	1610—1660.5 MHz
RECEIVE FREQUENCY	1525—1559 MHz
DATA RATES AVAILABLE	<b>Forward Link:</b> 600 bps, 1.3 Kbps, 2.6 Kbps, 5.2 Kbps, 10.4 Kbps, 20.6 Kbps, 52 Kbps, 131 Kbps, 235 Kbps <b>Return Link:</b> 600 bps, 1.3 Kbps, 2.6 Kbps, 4.9 Kbps
ANTENNA	Nine element phased array acquires and tracks satellite to 5° elevation
GPS	Internal Commercial GPS Optional
SECURITY	Supports AES128, AES192, AES256

\*Specifications are subject to change at any time, and without notice.

### About Comtech

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Comtech Mobile Datacom Corporation  
 20430 Century Blvd,  
 Germantown MD 20874 USA  
 Tel: 240.686.3300  
 Email: [sales@comtechmobile.com](mailto:sales@comtechmobile.com)  
[www.comtechmobile.com](http://www.comtechmobile.com)