Mantis II GDT

Features & Benefits

- Modular System: Integrated CDL terminal with high-gain antenna
- Maximum Dislocation: 7km dislocation from Control Group
- Man-Portable Networking: Easily deployable even in the most harsh environments
- Data Link Interoperability: CDL specification compliant (Standard and Bandwidth Efficient)

Cubic's Mantis II Ground Data Terminal (GDT) is a high-performance data terminal that supports long range, high data rate communications with airborne platforms equipped with a multitude of DoD standard Common Data Link (CDL) waveforms. The Mantis II antenna group is a powerful Data Link terminal capable of operating in the harshest environments to provide valuable real time data and video. Mantis II can be deployed in less than 10 minutes providing ground forces with secure expeditionary communications. The onboard GPS and compass provide precise positioning and alignment allowing the Mantis II to perform automatic calibration, making remote set-up easy.

Mantis II supports data transfers from Ku-band CDL-equipped aircraft, including Predator, Reaper, Sky Warrior, Fire Scout, LITENING targeting pod and others.The Mantis II provides operating ranges up to 250 nmi or more, depending on system configuration.

Mantis II GDT

Specifications

Programable Waveform Support
Waveform
Standard CDL
Bandwidth Efficient CDL (Legacy and Modern FEC)
466 ER[1]
Vortex Native Waveform (VNW)[1]

[1] TBS waveforms are available upon request

RF Band
Data Rates
Full duplex 200 kbps - 44.73 Mbps

Antenna	
Frequency Range	14.4 – 15.35 GHz
Antenna Gain	≈ 41 dBi
-3 dB Beamwidth	≈ 1.2° (Nominal)
Max EIRP	77 dBm

Encryption
NSA Type-1
Commercial AES-256

Certifications	
Information Assurance	DoDI 8510.01 | DODIIS DS-2610-142-01
Environmental	MIL-STD-810G
EMI/EMC	MIL-STD-461F
Operating Temperature	-30°C to +60°C (Antenna Group) 18°C to +29°C (VINE)

Data Interfaces
User Interface Group
Ethernet: 10/100 BASE-T Ethernet Interfaces
Fiber Optical : cable lengths of 1 km, 7km max dislocation
DS-101/DS-102 Key Fil interface
Analog RS-170

Antenna Group	
Size	1.2m dish on 45” tripod
Weight	170 lbs
Power	475W (110-220VC) at full TX Power

Transit Cases	Size	Weight
Receiver Transit Case | Weight	47.3" D x 24.3" W x 24" H	125 lbs
Pedestal Transit Case | Weight	39" D x 23" W x 17.3" H	128 lbs
Reflector Transit Case | Weight	31" D x 25.3" W x 26.5" H	75 lbs
GDT Power Supply | Weight	12" D x 8" W x 11.2" H	33 lbs

- STD-CDL
- BE-CDL Rev A / Rev B
- Tatical 1.6, 3.2, 6.4 and
- 466ER available

MANTIS II Terminal

Fiber Optic

©CD-Mantis II Ground Data Terminal & VINE Module
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