Communications & Power Industries

malibu division

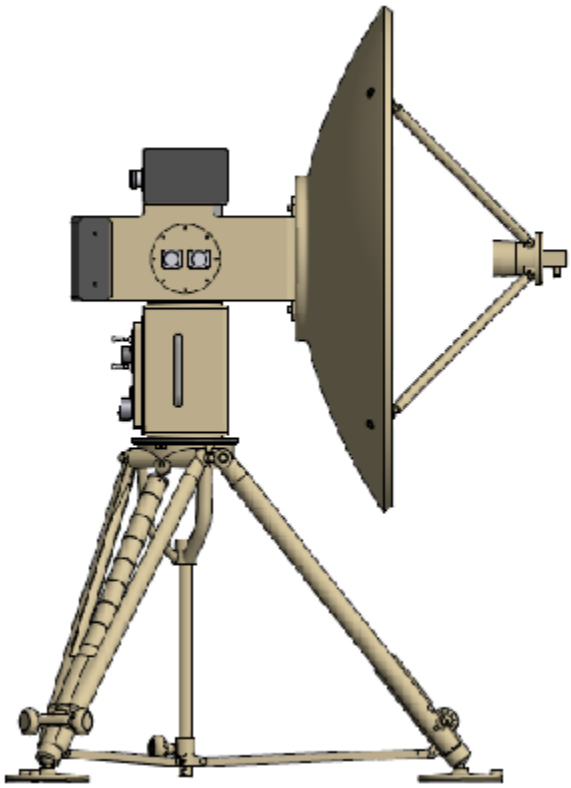
Model **GDA-36CB**

Ground Datalink Antenna

Product Data Sheet

Features:

- C Band Frequency Coverage 4.4 – 5.85 GHz
- 36" Diameter Reflector
- Full Duplex
- Prime Focus Configuration
- Lightweight Pedestal Assembly
- MIL-STD 810F Compliant
- UDP/IP Command and Control Interface
- Tilt Compass Module (Optional)
- GPS Antenna (Optional)
- Omnidirectional Antenna (Optional)
- Radome (Optional)
- Power Supply (Optional)



The tactical Ground Datalink Antenna (GDA) was designed for quick deployment in harsh environments, and can be deployed in less than 5 minutes with no hand tools required. A standard 36 inch lightweight composite parabolic reflector provides high antenna gain. The system Antenna Control Unit (ACU), Servo Amplifiers and Power Supplies are self-contained in the pedestal base. Operator interfaces for command and control are provided through an Ethernet UDP/IP port and a serial control interface is optional. The GDA-36CB features mounting provisions for Radio Frequency Equipment (RFE) and modem directly behind the reflector. This provides optimum RF performance and eliminates the need for rotary joints. Extra channels on the slip ring provide command and control pathways. The optional Tilt Compass Module (TCM) allows the antenna to automatically compensate for sloping terrain with up to 5° slope in any direction and also find magnetic north for the install location.

Model **GDA-36CB**

Specifications*

KEY PERFORMANCE VALUES

RF/Electrical Parameters	C-Band
Frequency Range	4.4 – 5.85 GHz
Gain Assumes 1 dB Cable Loss to RFE	28.5 – 31 dB
Beamwidth	5.1 – 4.3°
Polarization	Linear
Aperture Size	3 ft. diameter
Software Interface	
Ethernet Data Protocol	CPI HD-30T ICD 1494004 (UGDT)
Mechanical Parameters	
Environmental Qualifications	MIL-810 F Method 5xx
Velocity	>20°/second
Acceleration	>20°/second^2
Pointing Accuracy	>0.2°
Options	
Dual Channel Rotary Joint	For configurations with RFE below elevation axis
GPS	Latitude, longitude and altitude determination
OMNI	For close and overhead links
IMU/AHRS	Provides auto-leveling and true north determination
Radome	For entire antenna system
Transit Cases	2 cases for transportation

Environmental Parameters		
Temperature	Operating	-40°C to +50°C +1120 w/m^2 solar
	Storage/Transit	-40°C to +70°C +1120 w/m^2 solar
Wind Loading		Operational to 40 MPH
Humidity		100% RH per AR-70-38
Altitude	Operating	Below Sea Level to 10,500 ft. MSL
	Non-Operating	≤ 40,000 ft. MSL
Rain		Up to 8" / Hour
Snow Load		10 lbs./ft.^{2} returnable to operation in 15 min.

*Specifications subject to change

Model **GDA-36CB**
Ground Datalink Antenna

1_2015

CPI Malibu Division • 3760-A Calle Tecate, Camarillo, CA 93012-5060 • Tel: (805) 383-1829 • Fax: (805) 383-1859 • www.cpii.com/malibu