

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.

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Specifications*

KEY PERFORMANCE VALUES

RF/Electrical Parameters		C-Band
Frequency Range	4.4 – 5.85 GHz	
Gain	28.5 – 31 dB	
Assumes 1 dB Cable Loss to RFE		
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