

malibu division

Model GDA-36QB

Ground Datalink Antenna

Product Data Sheet

Features:

- Quad Band (L, S, C, Ku) Frequency Coverage 1.625 15.35 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-36QB 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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		S	pecifications*			
KEY PERFORMANCE VALUES						
RF/Electrical Parame	ters	L-Band	S-Band	C-Band	Ku-Band	
Frequency Range		1.625 - 1.850 GH	z 2.20 - 2.50 GHz	4.4 – 5.85 GHz	14.4 – 15.35 GHz	
Gain						
Assumes 1 dB Cable Loss to RFE		15 - 21 dB	21 – 22.5 dB	27 – 28 dB	37.5 – 38 dB	
Beamwidth		14 – 11°	12 – 8°	6 – 4°	1.7°	
Polarization			Linear		Circular	
Aperture Size		3 ft. diameter				
Software Interface						
Ethernet Data Protocol		CPI HD-30T ICD 1494004 (UGDT)				
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Mechanical Paramete	ers					
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 Paran	neters					
Temperature	Operating		-40°C to +55°C +1120 w/m ² solar (with warm-up)			
	Storage/Tr	ansit	-40°C to +70°C +1120 w/m² 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-Opera	nting	≤ 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

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