

# PDA-120 Go Anywhere with High Performance



### PDA-120

PDA-120 is a fully motorized Gregorian offset Antenna System with a 1.2m and a perfectly shaped Carbon-Fiber POD (Shell) protection for the antenna and BUC against weather influences and to improve aerodynamics of vehicle.

The PDA-120 Antenna System includes precision-made and accurate Carbon-Fiber Reflector surface, combined with the Dual Optic design provides remarkably low sidelobes and excellent cross-polar performance with the specially designed feed-horn system.

The lightweight construction and compact installation on top of any kind of Vehicle make it the ideal choice for fast Newsgathering (SNG) for broadcasters and VSAT applications (Disaster Relief Emergency Communications, Corporate Networks, Military satellite communications).

#### COMPATIBILITY

- MIL-STD-810G Compliant
- MIL-STD-1472 Compliant
- MIL-STD-188-164A Compliant
- > ITU-RS-580 Compliant
- ► ITU-RS-465-6 Compliant
- **EUTELSAT Compliant**

## **Key Features**

- > Ku, Ka, X, DBS Band options are available
- Strong yet lightweight Carbon-Fiber design which rigorously tested to operate in the toughest environments (wind, rain, sun...)
- Entirely zero-backlash mechanical drive system
- Carbon-Fiber
- Easy vehicle integration
- Optional Beacon Tracking
- Optional De-Ice
- > 0,01° pointing accuracy with resolvers at 3 axes
- Manual drive tool kit for emergency situations
- Optional hand-held control unit
- One-Button Operation





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GENERAL SPECIFICATIONS	
Reflector Diameter	1.2m
Reflector Type	Gregorian Offset
Operation On-Air Time	~3 Minutes
Antenna Concept	Gregorian dual offset antenna with 1.2m elliptical main reflector, folding feed-arm, fixed sub-reflector

RF CHARACTERISTIC					
		Ku-Band	Ka-Band	X-Band	
Frequency (GHz)	Tx Rx	13.75 - 14.50 10.70 - 12.75	17.7 - 21.2 27.5 - 31	7.9 - 8.4 7.25 - 7.75	
Antenna Gain (±0.2 dBi)	Tx Rx	43,0 (Midband) 41.8 (Midband)	48.7+20log(f/29.25) 45.3+20log(f/19.45)	38.0+20log(f/8.25) 37.4+20log(f/7.5)	
Polarization		2 Port Linear (3 Port Optional)	Circular	Circular	
TX/RX Isolation		85 dB			
Satellite Operator Compliancy		Compliant with most of satellite operator requirements			
VSWR		1.3			
Cross Polar Rejection		>35 dB within 1 dB beamwidth			
Side Lobe		-14 dB (First Side Lobe)			

MECHANICAL SPECIFICATIONS							
		Azimuth	Elevation	Polarization			
Drive Rates	Slow Medium Fast	0.4° / sec 2.5° / sec 4.5° / sec	0.1° / sec 1.5° / sec 3.0° / sec	0.4° / sec 1.9° / sec 3.42° / sec			
Antenna Travels		± 195°	Up to 90°	± 115°			
Manual Override Mechanism		Manual override fo	Manual override for elevation and azimuth drive system				

ENVIRONMENTAL SPECIFICATIONS			
Temperature	Compliant with MIL-STD-810g Method 501.5 and 502.5	Operational Survival	-30°C to 55°C -40°C to 70°C
Wind Speed	Compliant with ESOG-120	Operational Survival	72 km/h 180 km/h
Rain	Compliant with MIL-STD-810g Method 506.5	Survival in heav	y rainstorm
Humidity	Compliant with MIL-STD-810g Method 507.5	Up to 100% with	condensation
Solar Radiation	Compliant with MIL-STD-810g Method 505.5		
Low Pressure	Compliant with MIL-STD-810g Method 500.5		
Shock	Compliant with MIL-STD-810g Method 516.5		
Sand and Dust	Compliant with MIL-STD-810g Method 510.5		
Tempreture Shock	Compliant with MIL-STD-810g Method 503.5		
Icing	Compliant with MIL-STD-810g Method 521.3		
Acoustics	Compliant with MIL-STD-1472		

Compliances / Certificates



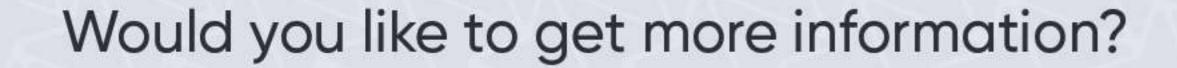












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