



Communications
& Technology

PDA-180

Go Anywhere with High Performance



STANDARD
MIL-STD
188-164A

STANDARD
MIL-STD
810G

PDA-180

The PDA-180 provides instant access to satellite communications in Ku, Ka, X or C Band. It ensures reliable transmission for applications which can be DSNG, disaster relief, emergency communications, networks, etc..

The PDA-180 Drive-Away Antenna's precision, accurate reflector surface and prime focus design provide remarkably low sidelobes and excellent cross-polar performance. It has a three axes positioner which provides full antenna rotation and is entirely backlash-free in elevation, azimuth and polarization axes.

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, C Band options are available
- Antenna pod is designed to accommodate 2 x 400W outdoor HPAs / SSPAs
- Carbon fibre composite reflector supported with light weight mount
- Entirely zero-backlash mechanical drive system
- Easy vehicle integration
- Optional beacon tracking
- Optional de-ice
- Manual drive tool kit for emergency situations
- High gain and very good cross polar rejection (> 35 db)
- One-Button Operation
- 0,01° pointing accuracy with resolvers at 3 axes



GENERAL SPECIFICATIONS

Reflector Diameter	1.8m
Reflector Type	Gregorian Offset
Operation On-Air Time	~3 Minutes
Antenna Concept	Prime focus antenna with 1.8m elliptical main reflector, folding feed-arm, fixed sub-reflector

RF CHARACTERISTIC

		Ku-Band	Ka-Band	C-Band
Frequency (GHz)	Tx	13.75 - 14.50	29.00 - 30.00	5.85 - 6.725
	Rx	10.70 - 12.75	19.20 - 21.20	3.40 - 4.20
Antenna Gain (±0.2 dBi)	Tx	46,50 @ 14.25 GHz	47.60 - 47.80 GHz	39.50 @ 6.25 GHz
	Rx	44.20 @ 11.70 GHz	43.90 - 44.50 GHz	35.40 @ 3.80 GHz
Polarization		2 Port Linear (3 Port Optional)	Circular	Circular / Linear
Satellite Operator Compliancy	Compliant with most of satellite operator requirements			
VSWR	1.3			
Cross Polar Isolation	>35 dB within 1 dB beamwidth			
Radiation Pattern Compliancy	Compliant with MIL-STD-188-164A, ITU - RS-580 and ITU-RS-465-6			

MECHANICAL SPECIFICATIONS

		Azimuth	Elevation	Polarization
Drive Rates	Slow	0.4° / sec	0.1° / sec	0.4° / sec
	Medium	2.5° / sec	1.5° / sec	1.9° / sec
	Fast	4.5° / sec	3.0° / sec	3.42° / sec
Antenna Travels		360°	10° to 80°	± 115°
Manual Override Mechanism	Manual override for elevation and azimuth drive system			

ENVIRONMENTAL SPECIFICATIONS

Temperature	Compliant with MIL-STD-810g Method 501.5 and 502.5	Operational -30°C to 55°C Survival -40°C to 70°C
Wind Speed	Compliant with ESOG-120	Operational 72 km/h Survival 180 km/h
Rain	Compliant with MIL-STD-810g Method 506.5	Survival in heavy 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	
Temperature 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



Would you like to get more information?

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