

**STANDARD**
MIL-STD
188-164A**STANDARD**
MIL-STD
810G

PDA-180

The PDA-180 provides instant access to satellite communications in C, X, Ku, or Ka 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 rejection 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

- C, X, Ku, or Ka Band options are available
- Antenna pod is designed to accommodate 2 x 400W outdoor HPAs / SSPAs
- Carbon-fiber composite reflector supported with lightweight 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



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