



Size:

1.80m

PDA-180

Readiness for Critical Missions

The PDA-180 delivers instant satellite connectivity across C, X, Ku, and Ka bands. Engineered for versatility, it ensures reliable, high-performance transmission for the most demanding applications, including DSNG, disaster relief, emergency communications, and network deployment.

Rapid Deployment

Designed for efficiency, the PDA-180 features an intuitive interface that allows for quick setup and operation with minimal training. The "One Touch" auto-deploy feature significantly reduces acquisition time, ensuring users can establish a stable link in minutes, even under challenging conditions.

High-Precision Mechanics

Featuring a precision-profiled reflector with a prime focus design, this antenna system delivers remarkably low sidelobes and excellent cross-polarization rejection. The robust three-axis positioner enables full rotation, while the entirely backlash-free drive system ensures pinpoint accuracy and reliability throughout its operational life.

Key Features

- C, X, Ku, Ka Bands. available
- Carbon-Fiber design
- High EIRP and very good cross-polar rejection (> 35 db)
- Integrated DVB-S/S2 & Beacon Receiver
- 0,01° pointing accuracy with resolvers at 3 axes
- Manual drive tool kit for emergency situations
- Supports OpenAmip
- Optional Beacon
- Optional De-Ice System
- Optional 4G/5G/LTE supported modem for load balancing and bonding solutions





GENERAL SPECIFICATIONS

Reflector Diameter
Reflector Type
Operation On-Air Time
Antenna Concept

PDA-180

1.8m
Gregorian Offset
~3 Minutes
Prime focus antenna with 1.8m elliptical main reflector, folding feed-arm, fixed sub-reflector

RF CHARACTERISTIC

Frequency (GHz) Tx
Frequency (GHz) Rx
Antenna Gain (±0.2 dBi) Tx
Antenna Gain (±0.2 dBi) Rx
Polarization
VSWR
Cross Polar Isolation
Radiation Pattern Compliancy

C-Band

5.85-6.725
3.40-4.20
39.50 @ 6.25 GHz
35.40 @ 3.80 GHz
Circular / Linear
1.3
>35 dB within 1 dB beamwidth
Compliant with MIL-STD-188-164A, ITU RS. 580-6 and ITU RS. 465-6

Ku-Band

17.7- 21.2
27.5 - 31
48.7+20log(f/29.25)
45.3+20log(f/19.45)
Circular

Ka-Band

29.00-30.00
19.20-21.20
47.60-47.80 GHz
43.90-44.50 GHz
Circular

MECHANICAL SPECIFICATIONS

Drive Rates Slow
Drive Rates Medium
Drive Rates Fast
Antenna Travel Range
Manual Override Mechanism

Azimuth

0.4° / sec
2.5° / sec
4.5° / sec
360°
Manual override for elevation and azimuth drive system

Elevation

0.1° / sec
1.5° / sec
3.0° / sec
10° to 80°

Polarization

0.4° / sec
1.9° / sec
3.42° / sec
± 115°

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational
Temperature Range Survival
Wind Speed Operational
Wind Speed Unstowed
Wind Speed Stowed
Wind Speed Survival
Rain
Humidity
Solar Radiation
Low Pressure
Shock
Sand and Dust
Temperature Shock
Icing
Acoustics

PDA-180

-30°C to 55°C, Compliant with MIL-STD-810g Method 501.5 and 502.5
-40°C to 70°C, Compliant with MIL-STD-810g Method 501.5 and 502.5
90 km/h, Compliant with ESOG-120
125 km/h
190 km/h
180 km/h
Survival in heavy rainstorm ,Compliant with MIL-STD-810g Method 506.5
Up to 100% with condensation, Compliant with MIL-STD-810g Method 507.5
Compliant with MIL-STD-810g Method 505.5
Compliant with MIL-STD-810g Method 500.5
Compliant with MIL-STD-810g Method 516.5
Compliant with MIL-STD-810g Method 510.5
Compliant with MIL-STD-810g Method 503.5
Compliant with MIL-STD-810g Method 521.3
Compliant with MIL-STD-1472

Specifications are subject to change.

