



Size:

1.0m

PDA-100-L

Commercial Grade but Mission-Critical Communications

The PDA-100-L is a compact vehicle-mounted antenna system engineered for professional mission-critical applications. Designed for high-bit-rate and high-power operations, it is the ideal solution for satellite news gathering (SNG), disaster relief, corporate networks, and emergency communications where reliability is essential.

Precision Engineering for Flawless Operation

Built around a robust tri-axis positioner, the antenna mount delivers full rotation with zero-backlash in elevation and azimuth. When paired with the PAC-500 indoor control unit, operation becomes exceptionally intuitive. One-touch auto-stow, auto-deploy, and high-precision auto-peak features, combined with variable motor speed control, set a new standard for user-friendly precision.

Superior RF Performance

The precision-crafted reflector surface and prime focus design deliver outstanding electrical performance. This ensures remarkably low sidelobes and excellent cross-polar rejection, guaranteeing clear signal transmission even in congested RF environments.

Key Features

- Available in X, Ku, DBS, Ka Bands
- High EIRP, high performance
- Carbon-Fiber composite reflector with light-weight mount
- High gain and very good cross polar rejection (> 35 db)
- Manual drive tool kit for emergency situations
- 0,01° pointing accuracy with resolvers at 3 axes
- Optional Beacon Tracking
- Optional De-Ice System
- Optional hand-held control unit
- 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-100-L

1.0m
Prime-Focus
~3 Minutes
Prime-Focus antenna with 1.0m elliptical main reflector, feed arm

RF CHARACTERISTIC

Frequency (GHz) Tx
Frequency (GHz) Rx
Antenna Gain (±0.2 dBi) Tx
Antenna Gain (±0.2 dBi) Rx
Polarization
TX/RX Isolation (dB)
VSWR
Cross Polar Rejection
Antenna Pattern Compliancy

Ku-Band

13.75-14.50
10.70-12.75
41.2 (Midband)
40.1 (Midband)
2 Port Linear (3 Port Optional)
85
1.3
>35 dB within 1 dB beamwidth
ITU-R S.580-6 and ITU-R S.465-6

Ka-Band

27.50-31.00
17.70 - 21.20
47.0+20log(f/30.0)
43.9+20log(f/20.0)
Circular
1.3
>35 dBw

MECHANICAL SPECIFICATIONS

Drive Rates Slow
Drive Rates Fast
Antenna Travels
Manual Override Mechanism

Azimuth

0.32° / sec
3.42° / sec
± 220°
Manual override for elevation and azimuth drive system

Elevation

0.32% / sec
1.5° / sec
Up to 90°

Polarization

0.32° / sec
3.42° / sec
± 115°

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational
Temperature Range Survival
Wind Speed Operational
Wind Speed Survival
Rain
Humidity

PDA-100-L

-30°C to 55°C
-40°C to 60°C
60 km/h, Unstowed: 112 km/h
130 km/h Stowed: 137 km/h
Survival in heavy rainstorm
0% to 100% with condensation

Specifications are subject to change.

