



PDA-100-L

The PDA-100-L is the latest technology, compact, vehicle mounted antenna system which is designed for professional mission critical applications such as high bit rate/high power news gathering SNG, disaster relief, corporate networks, communications etc.

The well-engineered antenna mount with tri-axis positioner provides full antenna rotation and polarization with zero-backlash in elevation and azimuth. The operation is extremely easy with antenna sensor kit option is fitted with a PAC-500 indoor antenna control unit provides truly user friendly operation. One touch auto-stow, auto-deploy and high precision Auto-peak features with fast-mid-slow motor speed control in all three axes makes the antenna system leader in its class.

The PDA-100-L's precision, accurate reflector surface and prime focus design provides remarkably low sidelobes and excellent cross-polar rejection performance.

COMPATIBILITY

- ITU-RS-580 Compliant
- ITU-RS-465-6 Compliant
- EUTELSAT Compliant

Key Features

- X, Ku, DBS, Ka Bands options are available
- High EIRP, high performance 1.0m Prime-Focus antenna with very low sidelobes
- Carbon-Fiber composite reflector supported with light weight mount
- High gain and very good cross polar rejection (> 35 db)
- Optional Beacon Tracking
- Optional De-Ice System
- 0,01° pointing accuracy with resolvers at 3 axes
- Manual drive tool kit for emergency situations
- Optional hand-held control unit
- Optional 4G / 5G / LTE supported modem for load balancing and bonding solutions



GENERAL SPECIFICATIONS

| | |
|-----------------------|---|
| Reflector Diameter | 1.0m |
| Reflector Type | Prime-Focus |
| Operation On-Air Time | ~3 Minutes |
| Antenna Concept | Prime-Focus antenna with 1.0m elliptical main reflector, feed arm |

RF CHARACTERISTIC

| | | Ku-Band | Ka-Band |
|-------------------------------|----|--|--------------------------|
| Frequency (GHz) | Tx | 13.75 - 14.50 | 27.50 - 31.00 |
| | Rx | 10.70 - 12.75 | 17.70 - 21.20 |
| Antenna Gain (± 0.2 dBi) | Tx | 41.2 (Midband) | $47.0 + 20\log(f/30.0)$ |
| | Rx | 40.1 (Midband) | $43.9 + 20\log(f/20.0)$ |
| Polarization | | 2 Port Linear (3 Port Optional) | Circular |
| TX/RX Isolation | | 85 dB | |
| Satellite Operator Compliancy | | Compliant with most of satellite operator requirements | |
| VSWR | | 1.3 | 1.3 |
| Cross Polar Rejection | | >35 dB within 1 dB beamwidth | >35 dBw |
| Side Lobe | | -14 dB (First Side Lobe) | -14 dB (First Side Lobe) |

MECHANICAL SPECIFICATIONS

| | | Azimuth | Elevation | Polarization |
|---------------------------|------|--|-------------|-----------------|
| Drive Rates | Slow | 0.32° / sec | 0.32° / sec | 0.32° / sec |
| | Fast | 3.42° / sec | 1.5° / sec | 3.42° / sec |
| Antenna Travels | | $\pm 220^\circ$ | Up to 90° | $\pm 115^\circ$ |
| Manual Override Mechanism | | Manual override for elevation and azimuth drive system | | |

ENVIRONMENTAL SPECIFICATIONS

| | | |
|-------------|------------------------------|---------------|
| Temperature | Operational | -30°C to 55°C |
| | Survival | -40°C to 60°C |
| Wind Speed | Operational | 60 km/h |
| | Survival | 130 km/h |
| Rain | Survival in heavy rainstorm | |
| Humidity | 0% to 100% with condensation | |

Compliances / Certificates



eutelsat



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