



Communications  
& Technology

**PDA-100-L**

Go Anywhere with High Performance



## 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

## 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)
- 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

Specifications are subject to change,  
The pictures are for reference the final product might be different.



**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 ( $\pm 0.2$ 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
Antenna Pattern		ITU-R S.580-6 and ITU-R S.465-6	

**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		± 220°	Up to 90°	± 115°
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	Unstowed	112 km/h
	Survival	130 km/h	Stowed	137 km/h
Rain	Survival in heavy rainstorm			
Humidity	0% to 100% with condensation			

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