



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 their class.

The PDA-100-L's precision, accurate reflector surface and prime focus design provides remarkably low sidelobes and excellent cross-polar rejection performance. High precision pointing via resolver, boosted with 16-bit chipsets.

COMPATIBILITY

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

Key Features

- X, Ku, Ka, DBS Band 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
- 0,01° pointing accuracy with resolvers at 3 axes
- Manual drive tool kit for emergency situations
- Optional hand-held control unit
- One-Button Operation



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+20log(f/30.0)
	Rx	40.1 (Midband)	43.9+20log(f/20.0)
Polarization		2 Port Linear (3 Port Optional)	Circular
TX/RX Isolation		85 dB	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



TURKEY

P : +90 216 540 72 57
M : sales@pals.com.tr
W : www.pals.com.tr

NETHERLANDS

P : +31 6 85 52 63 16
M : sales@pals-comsat.com
W : www.pals-comsat.com

