



## PTA-100Ka Transportable Antenna

PROFEN's PTA-100Ka is a transportable (Fly-away) satellite antenna in Ka Band designed for quick deployment and operation in Broadcast SNG, and VSAT applications.

The antenna structure with ultra-robust aluminum mount and lightweight high-performance carbon fiber reflector makes it an ideal choice for Disaster Relief, Emergency Communications, Corporate Networks, and Military satellite communications since it can be easily deployed for a quick operation, even in harsh environment.

### Typical Applications

- ❖ Broadband Internet in urban and rural area
- ❖ Emergency communication from disaster area
- ❖ Corporate network extension via satellite
- ❖ Satellite News Gathering (SNG) for broadcast
- ❖ Homeland Security mobile satcom

### Key Features

- Portable & rigid mechanical structure
- 9 pieces carbon-fiber reflector
- Aluminum tripod structure
- Angular indicators on each axis
- Quick-click feed flange
- Support various type of transceiver/BUC
- Easy and tool free installation (<10min)
- Unique reflectors with latch mounting
- Total weight 20 kg (without cases)
- IATA complied carrying cases

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### RF SPECIFICATIONS

<b>Rx Frequency Range (GHz)</b>	17.7-19.2 19.2-20.2	<b>Antenna Noise Temperature</b>	40K @ 20° EL
<b>Tx Frequency Range (GHz)</b>	27.0-29.0 29.0-31.0	<b>Cross-Pol Isolation (dB)</b>	-35 dB on axis -32 dB in 1 dB BW
<b>Polarization</b>	Circular	<b>VSWR</b>	1.3:1
<b>Axis Ratio</b>	1.06 dB on axis		
<b>G/T @ mid-band and 20° EL</b>	23.2 dB/°K w/50K LNA	<b>Side Lobe Performance</b>	ITU-R S.580-6
<b>Tx Gain (mid-band) (dBi)</b>	47.5@29.0GHz	<b>Power Handling Capability</b>	200 W per port
<b>Rx Tx Gain (mid-band) (dBi)</b>	43.5@19.2GHz		

### ENVIRONMENTAL SPECIFICATIONS

<b>Temperature range</b>		<b>Wind Performance</b>	
<b>Operational</b>	-40 to +60 °C	<b>Operational</b>	60 kph
<b>Survival</b>	-40 to +70 °C	<b>Survival</b>	100 kph (Stowed)
<b>Rainfall</b>	Max 100mm/h	<b>Altitude</b>	4000m
<b>Humidity</b>	98 % Non-Condensing		

### MECHANICAL SPECIFICATIONS

<b>Antenna Size</b>	1.0 m	<b>Antenna Type</b>	Parabolic, ring-focus Splash plate sub-reflector
<b>Reflector</b>	9 pcs segmented Carbon Fiber	<b>Mount</b>	EL over AZ tripod
<b>Axis Travel</b>		<b>Weight</b>	32kg, IATA complied
<b>Azimuth</b>	± 25°	<b>Carrying Cases</b>	One hard case or two soft cases
<b>Elevation</b>	0° to 90°		
<b>Color</b>	White as standard (other colors optional)		
<b>RF Interface</b>	Rx: WR42 Tx: WR28		



\*Specification of the antenna is subject to change without any notice