



## PTA-180C Transportable Antenna

PROFEN's PTA-180C is a transportable (Fly-away) satellite antenna designed for quick deployment and operation in VSAT applications in the field.

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 Intranet/Internet in rural area
- ❖ Emergency communication from disaster area
- ❖ Corporate network extension via satellite
- ❖ Tactical mobile satellite communication

### Key Features

- Portable & Rigid Mechanical Structure
- Easy to install (< 20 min)
- Maintenance free bearings on each axis
- Lightweight 9 pieces carbon-fiber reflector and aluminum tripod structure
- Angular indicators on each axis
- Tool free installation
- Unique reflector plates with latch mounting
- Total weight 50 kg (without cases)
- IATA complied 4 pieces of carrying cases

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### RF SPECIFICATIONS

<b>Rx Frequency Range (GHz)</b>	4.500 to 4.800	<b>Antenna Noise Temperature</b>	58K @ 30° EL
<b>Tx Frequency Range (GHz)</b>	6.725 to 7.025	<b>Cross-Pol Isolation (CP)</b>	>30 dB on axis
<b>Polarization</b>	Co-pol Circular	<b>VSWR</b>	1.30:1
		<b>Tx to Rx Isolation</b>	65 dB
<b>G/T @ mid-band and 20° EL</b>	16.2 dB/°K w/50K LNA	<b>Side Lobe Performance</b>	ITU-R S.580-6
<b>Tx Gain (mid-band) (dBi)</b>	40.5 dBi @ 7.0 GHz	<b>Power Handling Capability</b>	500W per port
<b>Rx Tx Gain (mid-band) (dBi)</b>	37.3 dBi @ 4.8 Ghz		

### 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>	1.8m	<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>Cases Dimensions</b>	Case-1: 800x800x450mm
<b>Azimuth</b>	±200°	<b>WxDxH</b>	Case-2: 980x350x450mm
<b>Elevation</b>	0° to 90°		Case-3: 750x750x550mm
<b>Polarization</b>	±100° for 2-port feed		Case-4: 750x750x550mm
<b>Color</b>	White as standard (other colors optional)	<b>Cases Weights</b>	Case-1: 22 Kg
			Case-2: 32 Kg
			Case-3: 25 Kg
<b>RF Interface</b>	WR137 Cover Flange		Case-4: 25 Kg



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



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