



## 4.8 EARTH STATION ANTENNA

### C Band

### Model No: 482PCLPKP-23

The 4.8Mtr earth station antenna is designed for high structural stability & pointing accuracies.

The antenna can be used as Rx only applications in C Bands.

The antenna has an elevation over azimuth type of mount, to allow for easy pointing to any visible satellite within the Geo-Stationary arc. The antenna has 110° continuous coverage in Azimuth, extendable to 180° in 2 positions. The antenna withstands wind load 100kmph operational and 200kmph survival.



The antenna reflector is of dual shaped Gregorain configuration with corrugated conical feed horn and sub-reflector. The antenna meets the gain and side lobe specifications of International standards ITU-RS-580-6.

The reflector panels are Stretch formed to give surface accuracies below 0.5mm RMS. 12 no's of high strength doubly curved aluminum stretch formed panels on 12 no's radial trusses emanating from a center hub constitutes the reflector. The hub can house Receive/ Transmit electronics.

#### Options:

- ❖ De-icing for Reflector and feed
- ❖ Step Tracking mechanism using antenna control system & Beacon Receiver and Motor Controller.
- ❖ Polarization controller incorporated in A.C.U
- ❖ Turnkey Installation, Commissioning including Civil Foundation.



## ELECTRICAL

Antenna Optics	Gregorian
Frequency of operation	Rx ( Ghz )
C band	3.7-4.2
Antenna Gain dBi ( Mid Band )	Rx ( dBi )
C band	44
G / T ( Typical	
C Band	25.5 dB / °K with 35°K LNA
Cross pol Discrimination	30dB Min
Polarization	Linear or Circular
Feed	2-Port
Feed Flange	WR229
VSWR	1.30 : 1
Tx to Rx Isolation	90 dB with TRF

## MECHANICAL

Azimuth Travel	110° Continuous, and 180° in 2 positions
Elevation Travel	5° - 85°
Az & EL Travel Rate	4°/Min
Polarisation Travel	±90°
Weight of Reflector	500 Kgs
Weight of Pedestal	1000 Kgs
Reflector	12 Paneled solid Aluminium
Mount Structure	Steel ( Galvanised )
Foundation Size	Varies as per pedestal Design & Soil bearing capacity

## ENVIRONMENTAL

Operational Winds	70 Kmph gusting to 100 Kmph
Survival Winds	200 Kmph
Ambient Temperature	- 15° to + 50° C
Rain	Upto 100 mm/hr
Humidity	100%
Solar Radiation	360° BTU / hr / ft 2 or 1000 K Cal / hr / m2
Atmospheric Conditions	As encountered in Marine / Industrial