

## 4.6 M Earth Station Antenna SPECIFICATIONS

<b>ELECTRICAL</b>		
Antenna size	4.6Mtr	
Antenna Type	Prime Focus / Gregorian system	
<b>Frequency of operation</b>	<b>Rx ( Ghz )</b>	<b>Tx ( Ghz )</b>
C – Band	3.625 – 4.2	5.85 – 6.425
Ext – C Band	4.5 – 4.8	6.725 – 7.025
Ku - Band	10.700 – 12.750	14 – 14.5
<b>Antenna Gain dBi ( Mid Band )</b>	<b>Rx ( dBi )</b>	<b>Tx ( dBi )</b>
C – Band	43.0	47.0
Ext – C Band	44.5	48.0
Ku - Band	53.0	54.5
<b>G / T ( Typical )</b>		
C – Band	25.0 dB / °K with 35°K LNA	
Ext – C Band	26.0 dB / °K with 35°K LNA	
Ku - Band	31.8 dB / °K with 70°K LNA	
Cross pol Discrimination	30dB Min	
VSWR	1.30 : 1	
<b>Output wave guide flange</b>	<b>Rx</b>	<b>Tx</b>
C – Band	CPR 229G	CPR 137G
Ext – C Band	CPR 229G	CPR 137G
Ku - Band	WR 75	WR 75
<b>Power Handling Capacity</b>		
C – Band	2KW	
Ext – C Band	2KW	
Ku - Band	2KW	
<b>Radiation Pattern</b>	As per ITU – R.S.580 - 6	
<b>MECHANICAL</b>		
Coverage		
Azimuth Travel	110° Continuous, and 180° in 2 positions	
Elevation Travel	5° - 90°	
Travel Rate	4°/Min for Az & El	
Polarisation Travel	Manual ±95°	
Weight of Reflector	500Kgs	
Weight of Mount	1000Kgs	
Reflector Structure	Aluminium Alloy	
Mount Structure	Steel ( Galvanised )	
Foundation Size	4 x 4 x 0.5 Mtr	
<b>ENVIRONMENTAL</b>		
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	