

## 13.5 M Earth Station Antenna SPECIFICATIONS

<b>ELECTRICAL</b>		
Antenna size	13.5 Mtr	
Antenna Optics	Shaped Parabolic Cassegrain system	
Feed Type	Composite, Conical Horn Feed & Sub – Reflector	
Feed options	Feed - 2 Port / 4 Port Linear / Circular Feed in C / Ext - C / Ku Band. Composite C / Ku Band Rx only.	
<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	52.0	56.0
Ext – C Band	54.0	57.0
Ku - Band	61.5	63.0
<b>G / T ( Typical )</b>		
C – Band	33.0 dB / °K with 35°K LNA	
Ext – C Band	34.0 dB / °K with 35°K LNA	
Ku – Band	40.0 dB / °K with 70°K LNA	
Cross pol Discrimination	>30dB Min	
VSWR	1.30 : 1	
Tx to Rx Isolation	90 dB with TRF	
Rx to Rx Isolation	30dB	
<b>Feed Rotation</b>	Motorised Drive	
<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 flat	WR 75 flat
<b>Power Handling Capacity</b>		
C – Band	3KW	
Ext – C Band	3KW	
Ku – Band	2KW	
<b>Radiation Pattern</b>	As per ITU – R.S.580 – 6	
<b>MECHANICAL</b>		
Coverage		
Azimuth Travel	330° Continuous.	
Elevation Travel	5° - 90°	
Az & EL Travel Rate	4°/Min	
Polarisation Travel	± 95°	
Feed Rotation	± 190° Min	
Weight of Reflector	6 Tonnes	
Weight of Pedestal	7 Tonnes	
Reflector Structure	Aluminium Alloy	
Mount Structure	Steel ( Galvanised )	
Foundation Size	Varies as per pedestal Design	
<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%	
Atmospheric Conditions	As encountered in Marine / Industrial	