3.8 M Earth Station Antenna / VSAT SPECIFICATIONS

ELECTRICAL		
Antenna size	3.8 Mtr	
Frequency of operation	**Rx (Ghz)**	**Tx (Ghz)**
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
Antenna Gain dBi (Mid Band)	**Rx (dBi)**	**Tx (dBi)**
C – Band	42.0	45.5
Ext – C Band	43.0	46.0
Ku - Band	51.3	53.0
G / T (Typical)		
C – Band	23.0 dB / °K with 35°K LNA	
Ext – C Band	24.5 dB / °K with 35°K LNA	
Ku - Band	30.0 Db / °K with 70°K LNA	
Cross pol Descrimination	>30dB (on axis)	
Polarisation	Linear / Circular	
VSWR	1.30 : 1	
Feed Interface	**Rx**	**Tx**
C – Band	CPR 229G	CPR 137G or N Connector
Ext – C Band	CPR 229G	CPR 137G
Ku – Band	WR 75 flat	WR 75 flat
Side lobe Envelope		
1˚ ≤ 0 ≤ 20˚ : 29-25log 0		
20˚ ≤ 0 ≤ 26.3˚ : 3.5dBi		
20.3˚ ≤ 0 ≤ 48.0˚ : 32 – 25 log 0dBi		
Radiation Pattern	As per ITU – R.S.580 – 6	

MECHANICAL			
	Prime Focus	**Off-Set**	**Gregorian**
Reflector Diameter	3.8 Mtr	3.8 Mtr	3.8 Mtr
Reflector Material	Al Alloy B51SWP HE 30	Glass Fiber Re-inforced Plastic	Al Alloy HE30
Feed	Prime Focus	Off-Set	Gregorian
Center Hub Mount & Non Penetrating Mast	Steel Galvanised	Steel Galvanised	Steel Galvanised
Antenna Optics	12 panels on 12 Trusses	4 panels on 8 Trusses	12 panels on 12 Trusses
Azimuth Adjustment	360˚ Continuous	Fine adj ± 20˚	360˚ fine ± 20˚
Elevation	0˚ - 90˚ Continuous		0˚ - 90˚ Continuous
Net weight	1000 Kgs with Non penetrating mast.		

ENVIRONMENTAL	
Wind loading	Operational 80 Kmph
Survival Winds	200 Kmph
Temperature	-40˚ to + 60˚ C
Rain	100 mm/hr
Humidity	100%
Atmospheric Conditions	Salt, Pollutants as encountered in Coastal and Industrial areas.