



SATELLITE COMMUNICATION ANTENNA

PERFORMANCE SPECIFICATIONS (APERTURE 1.8 M)

★ R. F SPECIFICATIONS	★ C-Band		★ Ku-Band	
	RECEIVE	TRANSMIT	RECEIVE	TRANSMIT
1. Frequency	3.625-4.2Ghz	5.85-6.425Ghz	12.25-12.75Ghz *10.95-12.75Ghz	14.0-14.5Ghz
2. Gain at Midband	35.4dB	39.3dB	45.6 dB	46.5 dB
3. VSWR	1.25:1	1.25:1	1.25:1	1.25:1
4. Beamwidth (-3dB)	2.79°	1.78°	0.88°	0.78°
5. Antenna Noise Temperature				
5° Elevation	50°K		54°K	
10° Elevation	35°K		39°K	
20° Elevation	31 °K		30 °K	
30° Elevation	27 °K		28 °K	
6. Typical G/T at 20° Elevation, Clear Horizon, 4GHz with 55°K LNA	16.3dB/ °K		24.5dB/ °K (11.85Ghz, with 90°K LNA)	
7. Power Handling Capability		2kW		2kW
8. Feed Interface	CPR-229F	CPR-137G	WR-75F	WR-75G
9. Feed Insertion Loss	0.15dB	0.18dB	0.2dB	0.2dB
10. Cross Polarization Isolation				
On Axis	35dB	35dB	35dB	35dB
Within 1 dB Beamwidth	30dB	30dB	30dB	30dB
11. Port to Port Isolation (Tx-Rx with Filter)	≥ 85dB		≥ 85dB	
12. Axial Ratio (Circular Polarization) 2 Port Tx/Rx	1.3	better than 1.3		
13. Sidelobes				
1st sidelobe		-14dBi		-14dBi
100λ/D° ≤ θ ≤ 48°		29-25Log θ dBi		29-25Log θ dBi
* Provided according to User's requirement				
★ MECHANICAL SPECIFICATIONS		★ ENVIRONMENTAL SPECIFICATIONS		
1. Azimuth Travel	360°	1. Operational Wind Speed	20m/s	
2. Azimuth Travel Rate	0.5 °/s	2. Survival Wind Speed	35m/s	
3. Elevation Travel	5°-90° continuous	3. Ambient Temperature	-50°- 60°	
4. Elevation Travel Rate	0.5 °/s	4. Rain (operational and survival)	10cm/h	
5. Polarization Travel	±90 °	5. Solar Radiation	1000kcal/hm ²	
6. Materials of Reflectors	Steel	6. Relative Humidity	0%-100%	
7. Finish of Reflectors	White paint	7. Radial Ice	2.5cm	
8. Finish of Steel parts	hot dipped zinc	8. Seismic(Survival)	0.3G's Horizontal 0.1G's Vertical	
9. Weight (Gross / Net)	180 kg / 95kg			
10. Shipping Volume	20 feet 35 units 40 feet 70 units 40 feet HC 90 units			

Design and specifications subject to change without notice

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