



SATELLITE COMMUNICATION ANTENNA

PERFORMANCE SPECIFICATIONS ( APERTURE 3M )

★ R. F SPECIFICATIONS	★ C-Band		★ Ku-Band	
	RECEIVE	TRANSMIT	RECEIVE	TRANSMIT
1. Frequency	3.625-4.2Ghz *3.4-4.2Ghz	5.850-6.425Ghz 5.925-6.725Ghz	12.25 -12.75Ghz *10.95-12.75Ghz	14.0-14.5Ghz
2. Gain at Midband	39.89dB	43.67dB	49.71dB	50.94dB
3. VSWR	1.25:1	1.25:1	1.25:1	1.25:1
4. Beamwidth (-3dB)	1.68°	1.08°	0.54°	0.47°
5. Antenna Noise Temperature				
5° Elevation	41 °K		65 °K	
10° Elevation	28.5 °K		51 °K	
20° Elevation	24.7 °K		44 °K	
30° Elevation	23.7 °K		42 °K	
6. Typical G/T at 20° Elevation, Clear Horizon, 4Ghz with 55°K LNA	21dB/ °K		28.2dB/ °K	
7. Power Handling Capability		5kW	( 11.85Ghz, with 90 °K LNA )	2kW
8. Feed Interface	CPR-229F	CPR-137G	WR-75F	WR-75G
9. Feed Insertion Loss	0.15dB	0.18dB	0.25dB	0.4dB
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	1.09		
13. Sidelobes				
1st sidelobe		-14dB		-14dB
$100\lambda/D^\circ \leq \theta \leq 48^\circ$		29—25Log θ dBi		29—25Log θ dBi
* Provided according to User's requirement				
★ MECHANICAL SPECIFICATION		★ ENVIRONMENTAL SPECIFICATIONS		
1. Azimuth Travel	360°	1. Operational Wind Speed	35m/s	
2. Azimuth Travel Rate	0.5 °/s	2. Survival Wind Speed	55m/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 <sup>2</sup>	
6. Materials above the hub	fully-aluminum	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)	385kg/230kg			
10. Shipping Volume	2.7m <sup>3</sup>			
	one of 20' container can including 12 units			

Design and specifications subject to change without notice

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