



SATELLITE COMMUNICATION ANTENNA

PERFORMANCE SPECIFICATIONS (APERTURE 2.4M)

★ 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	12.25Ghz-12.75Ghz *10.95Ghz-12.75Ghz	14.0-14.5GHz
2. Gain at Midband	37.96dB	41.73dB	47.77dB	49.0dB
3. VSWR	1.25:1	1.25:1	1.25:1	1.25:1
4. Beamwidth (-3dB)	2.1°	1.35°	0.68°	0.58°
5. Antenna Noise Temperature				
5° Elevation	42°K		66°K	
10° Elevation	30 °K		52 °K	
20° Elevation	28 °K		45 °K	
30° Elevation	25 °K		43 °K	
6. Typical G/T at 20° Elevation, Clear Horizon, 4GHz with 55°K LNA	18.9dB/ °K		26.2 dB/ °K	
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	0.4dB
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	better than 1.3		
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 SPECIFICATIONS		★ 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 ²	
6. Materials of Reflectors	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)	255kg/172kg			
10. Shipping Volume	1.15m ³ one of 20' container can including 22 units			

Design and specifications subject to change without notice

SUMAN SATELLITE TECHNOLOGY COMPANY

#17 Lan Dian Chang Road, HaiDian District, Beijing, China 100097

Tel: +86-10-88455265 Fax: +86-10-88454630 E-mail: sumant@public.bta.net.cn Website: www.sumante.com