

3.7 METER EARTH STATION ANTENNA

Shaanxi Probecom Microwave Technology Co.,Ltd. is a specialized company engaged in the design and manufacture of satellite communication earth station antenna with a selected range from 1.8M to 16M (C-Band, KU-Band, Ka-Band, X-band, S-band, L-band)and relevant servo equipment including antenna control system and beacon receiver. Microwave antenna, TVRO antenna and Flyaway antenna, Microwave components and customerized products is also provided.



Probecom 3.7Meter ringfocus antenna providing Tx/Rx 2-port feed or Tx/Rx 4-port in switchable linear & circular polarization for C-band, 3.7m Ku band antenna only for linear polarization, can deliver exceptionally high performance for transmit/receive applications.

Probecom 3.7 M antenna RF specification can adhere to FCC Regulation25.209,IESS and ITU-RS.580-5,INMARSAT, ASIASAT,INTELSAT, APT and CHINASAT,etc.

Probecom 3.7M antenna reflector incorporates stretch-formed doubly contoured panels with matched radials and hub for ease of field alignment. The standard designed azimuth over elevation pedestal provides a cost-effective solution for high stiffness and stability, full orbital arc coverage and fine drive performance, and ensures the pointing accuracy required for Ku-band operation.

Highlighted Features

- *Meets CCIR 580 and INTELSAT Requirements*
- *CP/LP switchable feed*
- *High RF performance*
- *Galvanized Stainless steel hardware*
- *Different frequency ranges from many feed configurations*
- * Antenna reflector be pre-assembly in works, special designed taper-pin easy instllation and ensure on site assembly accuracy, no theodolite required*

Options

- *L,S,X bands and multi-bands*
- *800MHz bandwidth is available*
- *Feed blower or deicing with automatic controls*
- *Two or four Tx/Rx port in linear polarized feeds*

Antenna Accessory

- Motorization Kits*
- Limit Switches*
- ODU Support Kits*
- Factory Feed System Testing and Documentation*
- Ocean /Air Transport Packing*
- Foundation Kit*
- Lightening Rod Kit*
- Grounding Kit Cable-Mounting Kit*
- Anti-icing and Deicing*

Electrical Specification					
Type		C37T		K37T	
Operating Frequency, GHz		C-Band		Ku-Band	
		Receive	Transmit	Receive	Transmit
		3.625~4.2	5.85~6.425	10.95~12.75	13.75~14.5
Gain, Mid-band, dBi		41.94	45.52	51.24	52.55
Polarization		Linear/Circular		Linear	
XPD(on Axis), dB		35	35	35	35
XPD across 1dB Beam Width, dB		33	33	33	33
Axial Ratio (Circular-Polarized)	2-Port Feed	1.30	1.09		
	4-Port Feed	1.06	1.06		
VSWR		1.25	1.25	1.25	1.25
Antenna Noise Temperature					
2-port feed					
10° Elevation		35K		49K	
30° Elevation		29K		39K	
50° Elevation		25K		35K	
-3 dB Beam Width, Mid-band		1.31°	0.87°	0.43°	0.38°
Typical G/T (EL>10°)		24dB/K (30° LNA)		30.6dB/K (70° LNA)	
Tx. Power Capability, KW			5		2
Feed Interface		CPR-229F	CPR-137F	WR-75	WR-75
Feed Insertion Loss,dB		0.2	0.2	0.25	0.25
Isolation, Tx to Rx, dB		85		85	
First Side lobe		-14		-14	
90% Peaks under Following Envelop		29-25logθ(1°≤θ < 20°)		29-25logθ(1°≤θ < 20°)	
Mechanical Specification					
Antenna Diameter		3.7m			
Antenna Type		Ring Focus			
Surface Accuracy(RMS)		≤0.35mm			
Antenna Pointing Range	Azimuth Elevation Polarization	±85° 0°~90°(Continuous) ±90°(Continuous)			
Drive Mode		Manual or Motorized			
Motor Drive System	Azimuth Travel Rate Elevation Travel Rate	0.30°/S(0.06°/S) 0.20°/S(0.04°/S)			
Environmental Specification					
Operational Wind		72km/h gusting to 97km/h			
Survival Wind		200km/h			
Temperature		-40°~+60°			
Relative Humidity		100%			
Solar Radiation		1135Kcal/h/m ²			
Seismic(Survival)		0.3g(H), 0.15g(V)			

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