

## 9.0 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 9.0 Meter ringfocus antenna can deliver superior performance for C-band and Ku-band transmit/receive sat communication applications such as Broadcasters, Service Providers, GSM operator, Satellite operator, Military and Government Agencies, FreeLands or Rescue Organizations.

Probecom 9.0 Meter ring focus antenna adopts all aluminum re-enforced reflectors, consisting of precisely formed panels with matched radials and hub assemblies, ensure the ease of installation. 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 for C-Band Tx/Rx and Ku-Band Tx/Rx operations.

### 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*
- \*Ka band antenna with rotary pedestal is available*
- \* 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*
- \*Full motion antenna*
- \*Feed blower or deicing with automatic controls*
- \*Two or four Tx/Rx port in linear or circular 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		C90T		K90T	
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		49.66	53.24	58.96	60.27
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		2/4 Port Feed		2/4 Port Feed	
10° Elevation		35K/50K		60K/90K	
30° Elevation		26K/39K		50K/76K	
50° Elevation		23K/35K		44K/64K	
-3 dB Beam Width, Mid-band		0.54°	0.36°	0.19°	0.16°
Typical G/T ( EL>10° , 2-port )		32.0dB/K (30° LNA)		37.8dB/K (70° LNA)	
Tx. Power Capability, KW			5		2
Feed Interface		CPR-229F	CPR-137F	WR-75	WR-75
Feed Insertion Loss, dB		0.2/0.25	0.2/0.25	0.25/0.35	0.25/0.4
Isolation, Tx to Rx, dB		85		85	
Tx/Tx ,Rx /Rx, Linear , dB		30		30	
Tx/Tx ,Rx /Rx, Circular , dB		20		20	
Side lobe		CCIR 580-4			
Mechanical Specification					
Antenna Diameter		9m			
Antenna Type		Ring Focus			
Surface Accuracy(RMS)		≤0.4mm			
Antenna Pointing Range	Azimuth	±85°			
	Elevation	0°~90°(Continuous)			
	Polarization	±90°(Continuous)			
Drive Mode		Manual or Motorized			
Motor Drive System	Azimuth or Elevation Travel Rate	0.02°/S-0.04°/S			
	Polarization Travel Rate	1°/S			
Environmental Specification					
Operational Wind		79km/h gusting to 126km/h			
Survival Wind		200km/h			
Temperature		-40°~+60°			
Relative Humidity		100%			
Solar Radiation		1135Kcal/h/m <sup>2</sup>			
Seismic(Survival)		0.3g(H), 0.15g(V)			
Ice Loading		13mm Operational; 25mm Survival			

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