

7.3 Meter Earth Station Antenna

Probecom 7.3 Meter ring-focus antenna can deliver superior performance for satcommunication applications such as Broadcasters, Service Providers, GSM operator, Satellite operator, Military and Government Agencies, FreeLands or Rescue Organizations.

Probecom 7.3 Meter ringfocus antenna adopts all aluminum re-inforced 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 -Stainless 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 bandwith is avaliable
- -Full motion antenna
- -Feed blower or deicing with automatic controls
- -Two or four Tx/Rx port in linear or circular polarized feeds



Electrical Specification

Туре		C73T		K73T	
Operating Frequency, GHz		C-Band		Ku-Band	
		Receive	Transmit	Receive	Transmit
		3.4~4.2	5.85~6.65	10.95~12.75	13.75~14.5
Gain, Mid-band, dBi		47.59	51.58	57.14	58.45
Polarization		Linear/Circular		Linear	
XPD(on Axis), dB		35	35	35	35
XPD across 1dB Beam Width, dB		33	33	33	33
Axial Ratio	2-Port Feed	1.30	1.09		
(Circular-Polarized)	4-Port Feed	1.06	1.06		
VSWR		1.25	1.25	1.25	1.25
Antenna Noise Temperature		2/4Port Feed		2/4Port Feed	
	10° Elevation	35°K/42°K		60°K/66°K	
	30° Elevation	26°K/36°K		50°K/56°K	
	50° Elevation	24°K33°K		48°K/54°K	
-3 dB Beam Width, Mid-band		0.69°	0.43°	0.23°	0.19°
Typical G/T (EL>10°)		29.3dB/K		36.1dB/K	
		(30° LNA)		(70° LNA)	
Tx. Power Capability, KW			5		2
Feed Interface		CPR-229F	CPR-137G	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	
Rx/Rx,Tx/Tx Linear,dB		30		30	
Rx/Rx,Tx/Tx Circular,dB		20		20	
Sidelobe		CCIR 580-4			
Mechanical Sp	ecification				

Antenna Diameter

Antenna Type	Ring Focus		
Surface Accuracy (RMS)	≤0.35mm		
	Azimuth	±85°	
Antenna Pointing Range	Elevation	5°~90°(Continuous)	
	Polarization	±90°(Continuous)	
Drive Mode	Manual or Motorized		
	Azimuth Travel Rate	0.20°/S(0.04°/S)	
Motor Drive System	Elevation Travel Rate	1°/S	
Environmental Spe	cification		

7.3m

Operational Wind	79km/h gusting to 126km/h	
Survival Wind	198km/h	
Temperature	-40°~+60°	
Relative Humidity	100%	
Solar Radiation	1135Kcal/h/m ²	
Seismic(Survival)	0.3g(H), 0.15g(V)	
Ice Loading	13mm Operational; 30mm Survival	