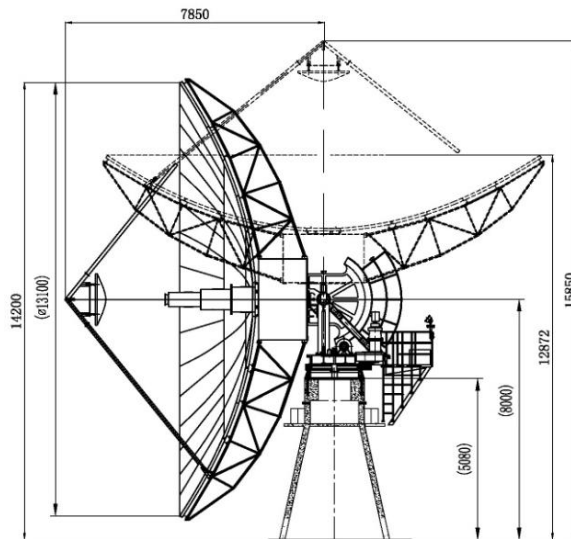


13M Earth Station Antenna System

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 13 Meter Cassegrain antenna can deliver superior performance, with linear and circular polarization, for Multi-bands, L,S,X Tx/Rx sat communication applications such as Broadcasters, Service Providers, GSM operator, Satellite operator, Military and Government Agencies, FreeLands or Rescue Organizations.

Probecom 13M antenna can meet FCC Regulation25.209,IESS and ITU-RS.580-5 specification for antenna pattern and polarization discrimination and INTELSAT requirements as specified in associated IESS documents.

Probecom 13 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
- Step-track control system/mono-pulse auto-tracking
- *Different frequency ranges from many feed configurations

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				
Antenna RF Specifications	C-Band 4 port Circulation/ Linear Polarized			
	Receive	Transmit	Receive	Transmit
Frequency in GHz	3.625-4.2	5.85-6.425	3.4-4.2	5.85-6.65
Antenna Gain Tx (at Tx port of feed) Rx (at Rx port of feed)	56.60+20lg[f/6(GHz)]dBi 53.10+20lg[f/4(GHz)]dBi		58.22+20lg[f/6(GHz)]dBi 54.80+20lg[f/4(GHz)]dBi	
Antenna Noise Temperature (Clear Sky and Light Wind)	48K		54K	
5°Elevation	36K		46K	
10°Elevation	29K		36K	
20°Elevation	24K		30K	
Half Beam width -3dB	0.30°	0.20°	0.30°	0.20°
Radiation Patterns: First Side lobe	≤-14dB, Meet ITU-RS.580-5 specifications			
Axial Ratio for CP	0.50dB per port			
Cross Polarization Isolation for LP	On Axis: 35dB		Within 1dB beam width: 30dB	
VSWR	CP : 1.25 : 1		LP : 1.3 : 1	
Feed Insertion Loss or Ohmic Loss	Rx: 0.30dB		Tx: 0.30dB	
Port to Port Isolation Tx to Rx (Tx Freq) Rx to Rx Tx to Tx (Same Band)	85dB CP: 20dB LP: 30dB CP: 20dB LP: 30dB			
Feed Interfaces	Rx: CPR-229F		Tx: CPR-137G	
Total Power Handling Capability	5Kw (CW) Tx			
Mechanical				
Antenna Diameter	13M			
Antenna Pedestal Type	Kingpost Pedestal / Rotation Pedestal			
Azimuth Travel Range	±85°/ 0°~ 360°			
Travel Rate for Az/EI	0.001°/s~0.3°/s			
Elevation Travel	0°to 90°(continuous)			
Backup Structure	Steel			
Pedestal Structure	Steel			
Finishes Reflector Surface Pedestal & Reflector Backup	High-diffusing white paint for aluminum panels Galvanized steel			
Surface Accuracy	0.5mm (R.M.S)			
Environmental				
Operational Winds	72km/h; gusts to 100km/h			
Survival Winds	200km/h			
Ambient Temperature	Operational: -40°to +60°C			
Rain (Operational and	10cm/h			
Relative Humidity (Operational	Up to 0% to 100% without condensation			
Ice (Survival)	2.5cm radial			
Shock and Vibration	As encountered during shipment by commercial air, sea or truck			
Corrosive Atmosphere	As encountered in coastal regions and/or heavily industrialized areas			
Seismic (Survival)	0.3G's horizontal 0.15G's vertical			

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