

2.4 METER KA BAND EARTH STATION ANTENNA

1. General Description

Probecom 2.4M Ka band 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 Ka-Band.

It is widely and ideally used for Broadcasters, Service Providers, GSM operator, Satellite operator, Military and Government Agencies, FreeLands or Rescue Organizations.

2. Highlighted Features

- *High RF performance
- *High gain, low sidelobes, low cross polarization
- *Galvanized stainless steel hardware
- *Different frequency ranges from many feed configurations

3. Options

- *Full motion antenna
- *Feed blower or deicing with automatic controls
- *Two or four Tx/Rx port in linear or circular polarized feeds
- *Installation and maintenance services

4. Antenna Accessory

- Motorization Kits
- Limit Switches
- ODU Support Kits
- Factory Feed System Testing and Documentation
- Ocean /Air Transport Packing
- Foundation Kit
- Grounding Kit Cable-Mounting Kit

5. Two ports Circular antenna specification

RF Specifications	Receive	Transmit
Operating Frequency,GHz	17.7-20.2	27.5-30.0
Gain, Mid-band,dBi	51.0+20Log(F/20)	54.5+20Log(F/30)
Polarization	LHCP/RHCP	
VSWR	1.30:1	
Antenna Noise temperature,K	105 (Elevation 20°)	
Feed Insertion Loss, dB	0.4	
Axial Ratio, dB	2.5	2.5
3dB bandwidth	0.46°	0.30°
Isolation, Tx to Rx, dB	>85	
G/T (dB/K)	>27.3+20lg(f/20) dB/K	
Side lobe	Fri st lobe: ≤-14dB ITU-RS 580	
Power handle		500W
Feed interface	WR42F (BJ-220)	WR28F (BJ-320)
Mechanical Specification		
Antenna Diameter	2.4m	
Reflector Material	Aluminum	
Antenna Optics	Offset	
Antenna Adjusting	AZ	±90°
Range	EL	5° to 90° Continuous
Drive Speed	0.01° /s	
Surface Accuracy	<0.25mm	
Environmental Specification		
Wind Loading	Operational	72km/h
	Survival	220km/h
Temperature	-40° to 60°C	
Rain (Operational)	100mm/hr	
Relative Humidity	100%	