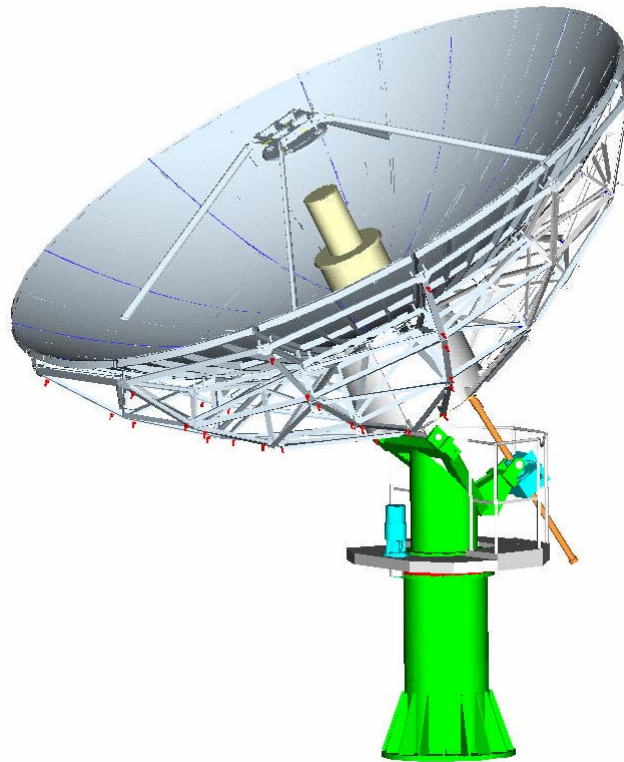


13 METER KA BAND EARTH STATION ANTENNA



1. General Description

Probecom 13M 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. Four ports Circular antenna specification

RF Specifications	Receive	Transmit
Operating Frequency, GHz	17.7-20.2	27.5-30.0
Gain, Mid-band, dBi	$66.1 + 20\text{Log}(F/20)$	$69.2 + 20\text{Log}(F/30)$
Polarization	LHCP/RHCP	
VSWR	1.30:1	
Antenna Noise temperature, K	150(Elevation 20°)	
Feed Insertion Loss, dB	0.6	
Axial Ratio, dB	0.75	0.5
3dB bandwidth	0.081°	0.057°
Isolation, Tx to Rx, dB	>85	
G/T(dB/K)	$>41.6+20\lg(f/20)$ dB/K	
Side lobe	First lobe: $\leq -14\text{dB}$ ITU-RS 580	
Power handle		400W
Feed interface	WR42F (BJ-220)	WR28F (BJ-320)

Mechanical Specification		
Antenna Diameter	13M	
Reflector Material	Aluminum	
Antenna Optics	Dual Modified Cassegrain	
Antenna Adjusting Range	AZ	$\pm 90^\circ$ Continuous
	EL	5° to 90° Continuous
Drive Speed	0.01°/s~0.2°/s	
Surface Accuracy	< 0.25 mm	
Environmental Specification		
Wind Loading	Operational	72 km/h
	Survival	200 km/h
Temperature	- 40° to 60°C	
Rain (operational)	100mm/ hr	
Relative Humidity	100%	