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1.2 METER KA BAND EARTH STATION ANTENNA

1. General Description

Probecom 1.2M 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. Two ports Circular antenna specification

RF Specification	Receive	Transmit
Operating Frequency, GHz	17.7-20.2	27.5-30.0
Gain, Mid-band, dBi	$44.9+20\log(F/20)$	$48.5+20\log(F/30)$
Polarization	LHCP/RHCP	
VSWR	1.30:1	
Antenna Noise temperature, K	110(Elevation 20°)	
Feed Insertion Loss, dB	0.4	
Axial Ratio, dB	2.5	2.5
3dB bandwidth	0.92°	0.61°
Isolation, Tx to Rx, dB	>85	
G/T (dB/K)	$>21.2+20\log(f/20)$ dB/K	
Side lobe	First lobe: ≤ -14 dB ITU-RS 580	
Power handle		100W
Feed interface	WR42F (BJ-220)	WR28F(BJ-320)
Mechanical Specification		
Antenna Diameter	1.2m	
Reflector Material	Aluminum	
Antenna Optics	Dual modified Ringfocus	
Antenna Adjusting Range	AZ	0° to 90° , continuous Fine Adjustment
	EL	$\pm 10^\circ$ Fine Adjustment, 360° Continuous
Drive	manual	
Surface Accuracy	<0.25mm	
Environmental Specification		
Wind Loading	Operational	72km/h
	Survival	200km/h
Temperature	-40° to 60°C	
Rain(operational)	100mm/hr	
Relative Humidity	100%	