

## 3.0 METER KA BAND EARTH STATION ANTENNA

### 1. General Description

Probecom 3.0M 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	52.9+20Log(F/20)	56.4+20Log(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	0.37°	0.25°
Isolation, Tx to Rx, dB	>85	
G/T (dB/K)	>29.1+20 lg(f/20) dB/K	ITU-RS 580
Power handle		500w
Feed interface	WR42F(BJ-220)	WR28F(BJ-320)
<b>Mechanical Specification</b>		
Antenna Diameter	3.0M	
Reflector Material	Aluminum	
Antenna Optics	Dual Modified Ring-focus	
Antenna Adjusting	AZ	±90° (two sections)
Range	EL	5° to 90° Continuous
Drive Speed	0.01° /s	
Surface Accuracy	<0.25mm	
<b>Environmental Specification</b>		
Wind Loading	Operational	72km/h
	Survival	200km/h
Temperature	-40° to 60°C	
Rain(operational)	100mm/hr	
Relative Humidity	100%	