

# **GS20M EARTH STATION ANTENNA**

## **Key Features**

- \* Meets CCIR 580 and INTELSAT Requirements
- \* CP/LP switchable feed
- \* High RF performance
- \* Galvanized steel hardware
- \* Step-track control system
- \* Different frequency ranges from many feed configurations
- \* Antenna reflector be pre-assembly in works, special designed taper-pin easy installation and ensure on site assembly accuracy.

#### **Antenna Accessories**

- \* Motorization Kits
- \* Limit Switches
- \* ODU Support Kits
- \* Factory Feed System Testing and Documentation
- \* Ocean Transport Packing
- \* Foundation Kit
- \* Lightening Rod Kit
- \* Grounding Kit Cable-Mounting Kit
- \* Anti-icing and Deicing

#### **Options**

- \* L,S,X bands and multi-bands
- \* 800MHz band with is available
- \* Full motion antenna
- \* Feed blower or deicing with automatic controls
- \* Two or four Tx/Rx port in linear or circular polarized feeds

### 20M ANTENNA WITH 4 PORT DUAL LINER/CIRCULAR POL.FEED

	C-BAND		Ku-BAND	
Operating Frequency, GHz	Receive	Transmit	Receive	Transmit
	3.4~4.2	5.85~6.65	10.95~12.75	13.75~14.5
Antenna Gain, dBi:	60.20+20lg [f/6(GHz)] 56.75+20lg [f/4(GHz)]		66+20lg [f/11.8(GHz)] 67.17+20lg [f/14(GHz)]	
Tx(at Tx port to feed)				
Rx((at Rx port of feed)				
Cross Polarization Isolation for LP	On Axis: 35dB, Within 1dB beamwidth:30dB			
Axial Ratio (dB) for CP	0.5dB per port			
VSWR	CP:1.25:1 LP:1.3:1			
Antenna Noise Temperature:	2 port feed		2 port feed	
5° Elevation	54°K		68°K	<b>9 9</b> 0



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46°K		60°K	
36°K	34444 <b>4</b>	52°K	
30°K		44°K	
0.24°	0.16°	0.083°	0.073°
	5kw (cw) pe	er Tx port	
CPR-229G	CPR-137G	WR-75	WR-75
0.4	0.4	0.5	0.5
- 1	85	dB	
	CP: 20dB	LP: <mark>30</mark> dB	
11/2/2	CP: 20dB	LP: <mark>3</mark> 0dB	
≤-14	, Meet ITU-RS.5	80-5 specificat	ions
	36°K 30°K 0.24° CPR-229G 0.4	36°K 30°K 0.24° 0.16° 5kw (cw) por CPR-229G 0.4 0.4 85 CP: 20dB CP: 20dB	36°K 52°K 44°K 0.24° 0.16° 0.083° 5kw (cw) per Tx port CPR-229G CPR-137G WR-75 0.4 0.5 85dB CP: 20dB LP: 30dB

# MECHANICAL SPECIFICATION

Antenna Pointing Range	17 C F R R . T & B
Azimuth	0°~170°/ 0°~360°(Continuous)
Elevation	0°∼90°(Continuous)
Finishes Reflector Surface Pedestal & Back Structure	Aluminum panels with high-diffusing white paint Galvanized steel
Surface Accuracy (RMS)	0.7mm (R.M.S)

# **ENVIRONMENTAL SPECIFICATION**

Operational Wind	72km/h Gusting to 100km/h		
Survival Wind	200km/h		
Rain	Up to 100mm/h operational and survival		
Relative Humidity	Up to 100% operational and survival		
Temperature	-40°C ∼ + 60°C		
Radial Ice(Survival)	25mm on all surface		
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 (H), 0.15g (V)		