

## GS16M 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

### ELECTRICAL SPECIFICATION

	C-Band		Ku-Band	
	Receive	Transmit	Receive	Transmit
Operating Frequency, GHz	3.625~4.2	5.85~6.425	12.25~12.75	14.0~14.5
Gain, Mid-band, dBi	54.66	58.24	64.42	65.35
Polarization	Linear/ Circular		Linear	
XPD (on Axis), dB	35	35	35	35
XPD across 1dB Beam Width, dB	33	33	33	33
Axial Ratio (Circular-Polarized)	0.5	0.5		
VSWR	1.25	1.25	1.25	1.25
Antenna Noise Temperature 10° Elevation	2/4 port feed 35°K/40°K		2/4 port feed 60°K/66°K	

20° Elevation	27°K/34°K		50°K/56°K	
40° Elevation	24°K/30°K		44°K/50°K	
-3dB Beam Width, Mid-band	0.304°	0.201°	0.1°	0.09°
Tx. Power Capability, KW		5		2
Feed Interface	CPR-229G	CPR-137G	WR-75	WR-75
Feed Insertion Loss,dB	0.2	0.2	0.25	0.25
Isolation, Tx to Rx, dB	85	85		
Radiation Pattern:First Sidelobe	≤-14, Meet ITU-RS.580-5 and other requirements			

### MECHANICAL SPECIFICATION

Antenna Diameter	16M
Antenna Type	Shaped Cassegrain
Antenna Pedestal Option	Kingpost Pedestal/Rotation Pedestal
Antenna Pointing Range	
Azimuth	0°~170°/ 0°~360°(Continuous)
Elevation	0°~90°(Continuous)
Polarization	180°(Continuous)
Motorizing	
Azimuth Travelling speed	0.10°/s
Elevation Travelling speed	0.120°/s
Polarization Travelling speed	1°/s
Finishes	
Reflector Surface	Aluminum panels with high-diffusing white paint
Pedestal & Back Structure	Galvanized steel
Surface Accuracy (RMS)	0.5mm

### ENVIRONMENTAL SPECIFICATION

Operational Wind	72km/h Gusting to 97km/h
Survival Wind	216km/h
Temperature	-40°C ~ +60°C
Relative Humidity	100%
Solar Radiation	1135Kcal/ h/ m <sup>2</sup>
Seismic (Survival)	0.3g (H), 0.15g (V)

## GLOBAL STAR SATELLITE ANTENNA CO;LTD

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