

GS13M 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
- * 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	
Operating Frequency, GHz		Receive	Transmit	Receive	Transmit
		3.4~4.2	5.85~6.65	10.95~12.75	13.75~14.5
Gain, Mid-Band. dBi		56.37+20lg [f/6(GHz)]		62.25+20lg [f/11.8(GHz)]	
		52.98+20lg [f/4(GHz)]		63.38+20lg [f/14(GHz)]	
					1828
Polarization		Liner/Circular		1	100
XPD(on Axis),dB		35	35	35	35
XPD across 1dB Beam Width,dB		30	30	30	30
Axial Ratio(dB) for Circular Pol		0.5	0.5	0.5	0.5
VSWR	Liner Pol	1.3	1.3	1.3	1.3
	Circular Pol	1.25	1.25	1.25	1.25
Antenna Noise Temperature		2 port feed		2 port feed	
5° Elevation		54°K		65°K	



10° Elevation	46°K		58°K	
20° Elevation	36°K		50°K	
40° Elevation	30°K		42°K	
-3dB Beam Width, Mid-band	0.368°	0.25°	0.127°	0.11°
Tx Power, KW		5	/	2
Feed Interface	CPR-229F	CPR-137F	WR-75	WR-75
Feed Insertion Loss,dB	0.25	0.2	0.25	0.25
Isolation, Tx to Rx(Tx Freq)	85dB			
Radiation Pattern:First Sidelobe	≤-14, Meet ITU-RS.580-5 specifications			

MECHANICAL SPECIFICATION

Antenna Diameter	13M		
Antenna Type	Cassegrain		
Antenna Pedestal Options	Kingpost Pedestal/Rotation Pedestal		
Azimuth Travel Range	±85°/0°~360°		
Travel Rate for Az/El	0.001°/s~0.3°/s		
Elevation Travel	0°~90°(continuous)		
Backup Structure	Steel		
Pedestal Structure	Steel		
Finishes			
Reflector Surface	High-diffusing white paint for aluminum panels		
Pedestal & Back Structure	Hot-dip Galvanized steel		
Surface Accuracy (RMS)	0.5mm(R.M.S)		

ENVIRONMENTAL SPECIFICATION

Operational Wind	72km/h Gusting to 100km/h		
Survival Wind	200km/h		
Temperature	-40°C ∼ + 60°C		
Rain(Operational and Survival)	10cm/h		
Relative Humidity	Up to 0% to 100% without condensation		
Ice(Survival)	2.5cm radial		
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		
Seignia (Suprisal)	0.3G's horizontal		
Seismic (Survival)	0.15G's vertical		