GeoSat Microwave

- *Conform to CCIR 580 and INTELSAT Requirements*
- *High G/T, Excellent Sidelobe Performance*
- *Hot-dipped Galvanized Mount*
- *Switch for C Band Linear and Circular Polarization Feed*
- *Ring-focus Antenna, C/Ku Band*

CE

9.0 Meter C-Band Earth Station Antenna

Model: GA90MCTXRX

ELECTRICAL SPECIFICATION

Item	Specification	
	C-Band	
	Receive	Transmit
Operation Frequency, GHz	3.4~4.2	5.85~6.725
Gain, Mid-band, dBi	49.9	53.3
Polarization	Linear/Circular	
XPD (on Axis), dB	35	35
XPD (across 1dB Beam width),dB	33	33
Axial Ratio(Circular-Polarized), 2-port Feed	1.30	1.09
VSWR	1.25	1.25
Antenna Noise Temperature		
10°Elevation	35°K	
20°Elevation	26°K	
40°Elevation	24°K	
-3dB Beam width, Mid-band	0.57°	0.37°
Typical G/T(EL>10°)	30dB/°K (30°LNA)	
TX. Power Capability, KW		5
Feed Interface	CPR-229G	CPR-137G
Feed Insertion Loss	0.2	0.2
Isolation, TX to Rx,dB	90	
First Side Iobe	-14	-14
90% Peaks under Following Envelop	29-25logθ(1°≤θ<20°)	29-25logθ(1°≤θ<20°)

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MECHANICAL SPECIFICATION

Item	Specification
Antenna Diameter	9.0 m
Antenna Type	Cassegrain
Mount Type	El. over AZ.
Surface Accuracy (RMS)	≤ 0.5mm
Antenna Pointing Range and speed	
Azimuth	Standard type: +75°,+60° (Continuous), 0.05°/s
	Custom type: 0°~ 360° (Continuous), 0.05°/s
Elevation	3°~ 90° (Continuous), 0.05°/s
Polarization	360° (Continuous), 0.1°/s
Drive Mode	Motorized

ENVIRONMENTAL SPECIFICATION

Item	Specification
Operational Wind	72 km/h Gusting to 97 km/h
Survival Wind	216 km/h
Temperature	-40℃~+60℃
Relative Humidity	100%
Seismic (Survival)	0.3g(H), 0.15g(V)
Ice Loading	13mm Operational; 25mm Survival

Mechanical Diagram (Unit: inch (mm))