



- 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



9.0 Meter KU-Band Earth Station Antenna

Model: GA990MKUTXRX

ELECTRICAL SPECIFICATION

Item		Specification
		KU-Band
		Receive Transmit
Operation Frequency, GHz	10.7~12.75	13.75~14.5
Gain, Mid-band, dBi	59.4	60.5
Polarization	Linear	
XPD (on Axis), dB	35	35
XPD (across 1dB Beam width),dB	33	33
Axial Ratio(Circular-Polarized), 2-port Feed		
VSWR	1.25	1.25
Antenna Noise Temperature		
10°Elevation	61°K	
20°Elevation	50°K	
40°Elevation	43°K	
-3dB Beam width, Mid-band	0.2°	0.16°
Typical G/T(EL>10°)	36.3dB/°K (140°LNA)	
TX. Power Capability, KW		2
Feed Interface	WR-75	WR-75
Feed Insertion Loss	0.25	0.2
Isolation, TX to Rx,dB		85
First Side lobe	-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)	$\leq 0.5\text{mm}$
Antenna Pointing Range and speed	
Azimuth	Standard type: $+75^{\circ}, +60^{\circ}$ (Continuous), $0.05^{\circ}/\text{s}$ Custom type: $0^{\circ} \sim 360^{\circ}$ (Continuous), $0.05^{\circ}/\text{s}$
Elevation	$3^{\circ} \sim 90^{\circ}$ (Continuous), $0.05^{\circ}/\text{s}$
Polarization	360° (Continuous), $0.1^{\circ}/\text{s}$
Drive Mode	Motorized

ENVIRONMENTAL SPECIFICATION

Item	Specification
Operational Wind	72 km/h Gusting to 97 km/h
Survival Wind	216 km/h
Temperature	$-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$
Relative Humidity	100%
Seismic (Survival)	0.3g(H), 0.15g(V)
Ice Loading	13mm Operational; 25mm Survival

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Mechanical Diagram (Unit: inch (mm))

