



3.7Meters VSAT Antenna

ANTENNA FEATURES

Meets or Exceeds CCIR 580-4 and INTELSAT Requirements
Ring Focus
 High G/T, Excellent Pattern Characteristics
 Hot-dipped Galvanized Steel Ground Mount Assembly
 C-band Antenna Operating in 870MHz Bandwidth (Option)
 2-port, 3-port or 4-port Linear/Circular Feed
 Field Changeable Feed System, Switchable
 Circular to Linear C-band
 Antenna Az. 0°~360° (Continuous) Pointing Ranges

ANTENNA FEATURES

Motorization Kits
 Limit Switches
 Steptrack
 ODU Support Kits
 Factory Feed System Testing and Documentation
 Ocean Transport Packing
 Foundation Kit
 Lightning Rod Kit
 Grounding Kit
 Cable-Mounting Kit
 Major Subsystem Spare Part Kits
 Anti-icing and Deicing

ELECTRICAL SPECIFICATION

Type		SXV-370C		SXV-370Ku	
Operation Frequency, GHz		C-Band		Ku-Band	
		Receive	Transmit	Receive	Transmit
		3.4~4.2	5.85~6.725	10.95~12.75	13.75~14.5
Gain, Mid-band, dBi		42.2	45.4	51.4	52.7
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)	2-Port Feed	1.30	1.09		
	4-Port Feed	1.06	1.06		
VSWR		1.25	1.25	1.25	1.25
Antenna Noise Temperature 2-port Feed					
10° Elevation		35°K		49°K	
30° Elevation		29°K		39°K	
50° Elevation		25°K		35°K	
-3dB Beamwidth, Mid-band		1.25°	0.82°	0.44°	0.38°
Typical G/T (EL>10°)		24dB/°K (30° LNA)		30.6dB/°K (70° LNA)	
Feed Insertion Loss		0.2	0.2	0.25	0.2
TX. Power Capability, KW			5		2
Feed Interface		CPR-229G	CPR-137G	WR-75	WR-75
Isolation, Tx to Rx, dB		90		85	
First Sidelobe		-14dB		-14dB	
90% Peaks under Following Envelop		29-25log θ (1°= θ <20°)		29-25log θ (1°= θ <20°)	

MECHANICAL SPECIFICATION

Antenna Diameter		3.7m
Antenna Type		Ring Focus
Mount Type		EL. over AZ.
Surface Accuracy (RMS)		=0.5mm
Antenna Pointing Range	Azimuth	±90°,±65° (Continuous)
	Elevation	0°~ 90° (Continuous)
	Polarization	360° (Continuous)
Drive Mode		Manual or Motorized
Motor Drive System	Azimuth Travel Rate	0.3°/S (0.06°/S)
	Elevation Travel Rate	0.2°/S (0.04°/S)
	Polarization	1.0°/S

ENVIRONMENTAL SPECIFICATION

Operational Wind	72 km/h Gusting to 97 km/h
Survival Wind	216 km/h
Temperature	-40°C~+60°C
Relative Humidity	100%
Solar Radiation	1135Kcal/h/m ²
Seismic (Survival)	0.3g (H), 0.15g (V)
Ice Loading	13mm Operational; 25mm Survival