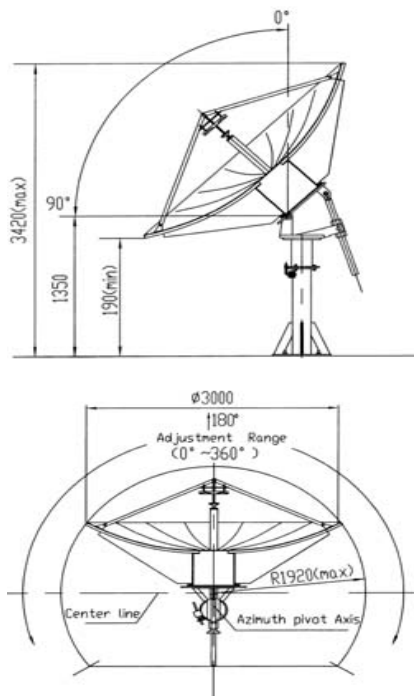


3.0 METER EARTH STATION ANTENNA



Antenna Accessory

- ▶ 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
- ▶ Major Subsystem Spare Park Kits
- ▶ Retro fitted de-icing



Features

- ▶ Meets or Exceeds CCIR 580 and INTELSAT Requirements
- ▶ Ring Focus
- ▶ High G/T, Excellent Pattern Characteristics
- ▶ Hot-dipped Galvanized Steel Ground Mount Assembly
- ▶ C-band Antenna Operating in 800MHz Bandwidth Option
- ▶ 2-port, Linear/Circular Feed
- ▶ Field Changeable Feed System, Switchable Circular to Linear C-band Option

Electrical Specification

	C-Band		Ku-Band	
	Receive	Transmit	Receive	Transmit
Operating Frequency, GHz	3.625 ~ 4.2	5.85 ~ 6.425	10.95 ~ 12.75	13.75 ~ 14.5
Gain, Mid-band, dBi	40.1	43.7	49.6	50.8
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 Feec	1.30	1.09		
VSWR	1.25	1.25	1.25	1.25
Antenna Noise Temperature, -port feec				
10° Elevation	29° K		48° K	
30° Elevation	22° K		39° K	
50° Elevation	19° K		35° K	
-3dB Beam Width, Midband	1.5°	1.1°	0.56°	0.49°
Typical G/T (EI>10°)	20.4dB/K (30° LNA)		27dB/K (70° LNA)	
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	-14		-14	
90% Peaks under Following Evelop	29-25logθ (1° ≤ θ < 20°)		29-25logθ (1° ≤ θ < 20°)	

Mechanical Specification

Antenna Diameter	3m
Antenna Type	Ring Focus
Mount Type	EI. Over Az.
Surface Accuracy (RMS)	≤ 0.5mm
Antenna Pointing Range	
Azimuth	0° ~ 360° , ±10° (Continuous)
Elevation	0° ~ 90° (Continuous)
Polarization	360° (Continuous)
Drive Mode	Manual or Motorized

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/m²
Seismic (Survival)	0.3g (h), 0.15g(V)
Ice Loading	13mm Operational; 25mm Survival