

ELECTRICAL SPECIFICATION

	C-Band		Ku-Band	
	Receive	Transmit	Receive	Transmit
Operating Frequency, GHz	3.4~4.2	5.85~6.425	10.95~12.75	13.75~14.5
Gain, Mid-band, dBi	44	47.3	53.2	54.3
Polarization	Linear/ Circular		Linear	
XPD (on Axis), dB	35	35	35	35
XPD (across 1dB Beamwidth), 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	34°K		52°K	
30° Elevation	24°K		41°K	
50° Elevation	21°K		37°K	
-3dB Beamwidth, Mid-band	1.12°	0.72°	0.37°	0.33°
Typical G/T (EI>10°)	25.9dB/°K (30° LNA)		32.3dB/°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 Envelop	29-25log θ (1°≤ θ <20°)		29-25log θ (1°≤ θ <20°)	

MECHANICAL SPECIFICATION

Antenna Diameter	4.5m
Antenna Type	Dual Reflector Modified Gregorian
Mount Type	EI. over Az.
Surface Accuracy (RMS)	≤ 0.5mm
Antenna Pointing Range	
Azimuth	±90°, ±60° (Continuous)
Elevation	0°~90° (Continuous)
Polarization	180° (Continuous)
Drive Mode	Manual or Motorized
Motor Drive System	
Azimuth Travel Rate	0.11°/S (0.06°/S)
Elevation Travel Rate	0.17°/S (0.08°/S)
Polarization	1°/S

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/m ²
Seismic (Survival)	0.3g (H), 0.15g (V)
Ice Loading	13mm Operational; 25mm Survival