



## 4.5m C/KU Band Rotary Antenna

### Feature

- \* Meets or exceeds ITU-RS 580-5 and INTELSAT requirements
- \* High G/T, excellent pattern characteristics
- \* Self-aligning aluminum reflector, no field alignment
- \* Factory feed system testing
- \* All of steel parts to be processed by hot dipped zinc
- \* 2-port or 4-port Linear/Circular Feed Field changeable feed system, switchable circular to linear C-band
- \* Foundation hardware kit included
- \* Air or ocean transport packing

### Options

- \* Specialized feed systems (e.g extended ,multi-band, Ka Band,DBS band )
- \* Antenna control system with tracking (Steptrack, Program Tracking and Inclined Orbit Tracking)
- \* Reflector and feed deicing systems
- \* ODU Support Kits, Lightning Rod Kit, Grounding Kit and Cable-Mounting Kit
- \* Turnkey installation and testing
- \* Non-penetrating mount
- \* High wind configuration



Email: [sales@allseeingtech.com](mailto:sales@allseeingtech.com)  
WEB: [www.allseeingtech.com](http://www.allseeingtech.com)



Tel: (+86)29-8886-0263  
Cell:(+86)177-2929-5262

**ELECTRICAL SPECIFICATION**

Type	FS450-EC		FS450-KU	
	C-Band		Ku-Band	
Operating Frequency, GHz	Receive	Transmit	Receive	Transmit
	3.4 ~ 4.2	5.85 ~ 6.725	10.70 ~ 12.75	13.75 ~ 14.5
Gain, Mid-band, dBi	44.3	47.3	53.7	55.1
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/4 port	1.30/1.06	1.09/1.06		
VSWR	1.25	1.25	1.25	1.25
Antenna Noise Temperature				
10° Elevation	34°K		52°K	
30° Elevation	24°K		41°K	
50° Elevation	21°K		37°K	
-3dB Beam Width, 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
Feed Insertion Loss	0.2	0.2	0.25	0.2
Isolation, Tx to Rx, dB	90		85	
First Sidelobe	-14		-14	
90% Peaks under Following Envelop	29-25log $\theta$ (1° $\leq\theta$ < 20°)		29-25log $\theta$ (1° $\leq\theta$ < 20°)	

**MECHANICAL SPECIFICATION**

Antenna Diameter	4.5 m
Antenna Type	Ring Focus
Mount Type	El. over Az.
Surface Accuracy (RMS)	$\leq 0.5\text{mm}$
Antenna Pointing Range	
Azimuth	0° ~ 360°(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 (0.04°/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/ m2
Seismic (Survival)	0.3g (H), 0.15g (V)
Ice Loading	13mm Operational; 25mm Survival