



6.5 Meter C-band, Ku-band Earth Station Antenna

The ASC Signal 6.5 meter earth station antenna provides high gain and exceptional pattern characteristics.

The electrical performance and versatility provide the ability to configure the antenna with a choice of linearly polarized or circularly polarized 2-port or 4-port combining networks. The 6.5 meter antenna is capable of operation at C-, X- and Ku-band with the selection of feed and combiner systems. This antenna features a computer-optimized dual reflector Gregorian system.

- High gain with excellent pattern characteristics.
- Rugged aluminum and steel construction.
- 3 Year warranty on structural components.
- Russian Homologation Certificate # OC/1-AO-136.



SPECIFICATIONS

6.5 Meter C-, X-, Ku-band Earth Station Antenna

Electrical Performance

	C-band 2-Port Circular Pol		C-band 4-Port Linear Pol		X-band 2-Port Circular Pol		Ku 4-Port Linear Pol	
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Txt
Frequency (GHz)	3.625- 4.200	5.850- 6.425	3.625- 4.200	5.850- 6.425	7.250- 7.750	7.900- 8.400	10.700- 12.750	13.750- 14.800
Antenna Gain at Output Flange (dBi ±0.2 dB) @ midband	47.30 51.10		47.30 51.00		52.40 53.10		55.90 67.30	
Antenna Noise Temperature (Clear Sky Conditions at 68°F (20°C))								
10° Elevation	53 K		55 K		67 K		84 K	
30° Elevation	43 K		46 K		58 K		72 K	
50° Elevation	42 K		45 K		56 K		69 K	
Cross Polarization On Axis	N/A	N/A	35 dB	35 dB	N/A	N/A	35 dB	35 dB
Within 1 dB Beamwidth	N/A	N/A	35 dB	35 dB	N/A	N/A	35 dB	35 dB
Axial Ratio	1.2	1.9	N/A	N/A	1.5	1.5	N/A	N/A
VSWR Performance	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1
Port-to-Port Isolation								
Rx to Rx	N/A		40 dB		20 dB		40 dB	
Tx to Rx	40 dB		85 dB		20 dB		75 dB	
Tx to Tx	N/A		40 dB		20 dB		40 dB	
Waveguide Interface Flange	Brass COR229G Brass 137G		Brass CPR229G Brass 137G		Alum. WR112 Alum. WR112		Brass WR75 Brass WR75	
Tx Power Capacity	500 W		2500 W		1000 W		1KW/port	

Mechanical Performance

Optics Type	Dual Reflector, Gregorian	
Reflector Material	Precision Formed Aluminum	
Reflector Segments	16	
Mount Type	Tripod Mount	
Antenna Pointing Range	Elevation	5° Coarse, 90° Continuous
	Azimuth	180° Coarse, 120° Continuous
	Polarization	180° Coarse, 180° Continuous
Hub/Enclosure Dimensions	Diameter	1.33 m (52 in)
	Depth	1.17 m (46 in)

Environmental Performance

Operational Temperature	-40°C to 52°C (-40°F to 125°F)
Wind Loading (Survival)	with Motor 200 km/h (125 mph) in Stationary Position without Motor 200 km/h (125 mph) in Stationary Position
Wind Loading (Operational)	with Motor 72 km/h (45 mph) with Gusts up to 105 km/h (65 mph) without Motor 72 km/h (45 mph) with Gusts up to 105 km/h (65 mph)
Rain	102 mm (4 in per hour)
Relative Humidity	100%
Shock and Vibration	As Encountered by Commercial Air, Rail and Truck
Atmospheric Conditions	As Encountered by Moderately Corrosive Coastal and Industrial Areas



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