



5.6 Meter Ka-band Earth Station Antenna

The ASC Signal 5.6 Ka-band earth station antenna features Gregorian optics and a fully shaped main reflector. This configuration provides excellent pattern characteristics, high gain and superior pointing accuracy.

The unique design of the 5.6 meter Ka-band pedestal eliminates the need for critical foundation orientation. Each pedestal is engineered with self aligning bearings of the elevation pivots. In addition, azimuth/elevation anti-backlash ball jacks are incorporated to provide smooth positioning of the antenna. A large equipment enclosure with door is located on the pedestal and allows hub mounting of electronic systems.

The ASC Signal 5.6 meter Ka-band antenna is backed by a three year warranty on all structural components.

- Pedestal mount is designed to allow non-critical foundation orientation.
- Rugged aluminum and steel construction provides high winds survival in any stationary position.
- 3 year warranty on all structural components



SPECIFICATIONS

5.6 Meter Ka-band Earth Station Antenna

Electrical Performance

	Ka-band 4-Port Circular Pol Feed		Ka-band 4-Port Wideband Circular Pol Feed		Ka-band 4-Port Linear Pol Feed		Ka-band 4-Port Linear Pol Feed Eutelsat Frequency	
	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit
Frequency (GHz)	20.200-21.200	30.000-31.000	18.300-20.200	28.300-30.000	17.700-20.200	27.000-30.050	21.400-22.000	27.000-30.050
Antenna Gain at Midband	59.80 dB	62.60 dB	59.20 dB	62.40 dB	59.00 dB	62.20 dB	60.20 dB	62.20 dB
Antenna Noise Temperature (Midband, Clear Sky Conditions at 68°F (20°C, Water Vapor Density < 7.5 g/m3)								
10° Elevation		160 K		132 K		128 K		190 K
30° Elevation		126 K		98 K		94 K		154 K
50° Elevation		108 K		92 K		88 K		137 K
Cross Polarization On Axis	N/A	N/A	N/A	N/A	35 dB	35 dB	35 dB	35 dB
Within 1 dB Beamwidth	N/A	N/A	N/A	N/A	35 dB	35 dB	35 dB	35 dB
Axial Ratio	0.50 dB	0.50 dB	0.50 dB	0.50 dB	N/A	N/A	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		18 dB		18 dB		35 dB		35 dB
Tx to Rx		85 dB		85 dB		85 dB		85 dB
Tx to Tx		18 dB		18 dB		35 dB		35 dB
Waveguide Interface Flange	WR42	WR28	WR42	WR28	WR42	WR28	WR42	WR28
Tx Power Capacity	500 W/Port		500 W/Port		500 W/Port		500 W/Port	

Mechanical Performance

Optics Type	Dual Reflector, Gregorian	
Reflector Material	Precision Formed Aluminum	
Reflector Segments	16	
Mount Type	Pedestal Mount	
Antenna Pointing Range	Elevation	5° Coarse, 85° Continuous
	Azimuth	180° Coarse, 120° Continuous
	Polarization	180° Coarse, 180° Continuous
Hub/Enclosure Dimensions	Diameter	1.32 m (52 in)
	Depth	1.17 m (46 in)

Environmental Performance

Operational Temperature	-40°C to 50°C (-40°F to 125°F)	
Wind Loading (Survival)	with Motor	125 mph (200 km/h) in Stationary Position
	without Motor	125 mph (200 km/h) in Stationary Position
Wind Loading (Operational)	with Motor	45 mph (72 km/h) with Gusts up to 65 mph (105 km/h)
	without Motor	45 mph (72 km/h) with Gusts up to 65 mph (105 km/h)
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	



ASC Signal Corporation
1120 Jupiter Road
Suite 102
Plano Texas 75074 USA

Telephone: +1-214-291-7654

Internet: www.ascsignal.com

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