



## 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 Wide-band Circular Pol Feed		Ka-band 4-Port Linear Pol Feed		Ka-band 4-Port Linear Pol Feed Eutelsat Freq		
	Receive	Trans-			Receive	Trans-	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	62.20dB
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 Within 1 dB Beamwidth	N/A	N/A	N/A	N/A	35 dB	35 dB	35 dB	35 dB	
	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 AN
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



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