



## 9.4 Meter C-band or Ku-band Earth Station Antenna

This antenna system is used worldwide in broadcast applications and high density data, voice and communications networks.



**L**ike all ASC Signal earth station antennas, the 9.4 Meter Earth Station Antenna provides high gain and exceptional pattern characteristics. The electrical performance and exceptional versatility provides the ability to configure the antenna with your choice of combining network. That versatility is provided at the time of initial purchase, as well as in the future, as your satellite communication requirements evolve. This antenna system is used worldwide in broadcast applications and high density data, voice and communications networks. The ASC Signal 9.4 meter earth station antenna features a computer optimized dual reflector Gregorian optics system and close-tolerance manufacturing techniques

This combination provides extremely accurate surface contour resulting in exceptionally high gain and closely controlled pattern characteristics. ASC Signal earth station antennas provide maximum durability with minimal maintenance.

- Rugged aluminum and steel construction provides 125 mph (200 km/h) survival.
- 3 year warranty on all structural components.
- Electrical performance meets or exceeds U.S. FCC regulation 25-209, Eutelsat standards and ITU-R, S.580-5 and S.465-5

## SPECIFICATIONS

### 9.4 Meter C-band or Ku-band Earth Station Antenna

#### Electrical Performance

	Ku-band 2-Port Linear Pol Feed		Ku-band 4-Port Linear Pol Feed		C-band 2-Port Circular Pol Feed		C-band 4-Port Circular Pol Feed		C-band 4-Port Linear Pol Feed	
	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit
Frequency (GHz)	10.700-13.250	13.750-14.800	10.700-12.750	13.750-14.800	3.625-4.200	5.850-6.425	3.625-4.200	5.850-6.425	3.625-4.200	5.850-6.425
Antenna Gain at Midband, dBi	59.50	60.90	59.20	60.60	50.70	54.40	50.60	54.30	50.60	54.30
Antenna Noise Temperature (Clear Sky Conditions at 20°C (68°F))										
10° Elevation	54 K		70 K		39 K		45 K		45 K	
30° Elevation	39 K		56 K		30 K		36 K		36 K	
50° Elevation	36 K		53 K		29 K		35 K		35 K	
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	1.30:1	1.30:1
Port-to-Port Isolation										
Tx/Rx	40 dB		75 dB		85 dB		85 dB		85 dB	
Tx/Tx	—		40 dB		85 dB		20 dB		40 dB	
Tx Power Capacity	2 kW		2 kW		0.5 kW		2.5 kW		2.5 kW	
Maximum Pressurization	0.50 psi		0.50 psi		0.50 psi		0.50 psi		0.50 psi	

#### Mechanical Performance

Optics Type .....	Dual-Reflector, Gregorian
Reflector Material .....	Precision Formed Aluminum
Reflector Segments .....	20
Hub/Enclosure Dimensions	
Diameter .....	2.14 m (84 in)
Depth .....	1.17 m (45 in)
Mount Type .....	Pedestal Mount
Antenna Pointing Range Course/(Continuous)	
Elevation .....	0° (90°)
Azimuth .....	180° (120°)
Polarization .....	360° (180°)

#### Environmental Performance

Operational Temperature .....	-45.5°C to 52°C (-40°F to 125°F)
Operational Winds .....	45 mph (72 km/h) Gusts to 65 mph (105 km/h) (Fixed or Motorized)
Survival Winds .....	125 mph (200 km/h) (In Stationary Position Fixed or Motorized)
Seismic (Earthquakes) .....	1 G Vertical and Horizontal Acceleration ( 8.3 Richter Magnitude and 11 Modified Mercalli Scale)
Rain .....	102 mm (4 in per hour)
Solar Radiation .....	1135 Watts/m <sup>2</sup> (360 BTU/h/ft <sup>2</sup> )
Relative Humidity .....	100%
Shock and Vibration .....	As Encountered by Commercial Air, Rail and Truck Shipment
Atmospheric Conditions .....	As Encountered by Moderately Corrosive Coastal and Industrial Areas



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