



This versatile antenna is capable of reception and transmission for C-band, X-band, K-band, Ku-band and Ka-band configurations.



4.9 Meter Five-Band Earth Station Antenna

The ASC Signal 4.9 meter earth station antenna is engineered for maximum accuracy, versatility and low maintenance.

This quad-band antenna features a dual reflector Gregorian system that provides excellent pattern characteristics and high gain. In addition, the 4.9 meter quad-band antenna is equipped with a self-aligning main reflector that requires no optical field alignment.

This versatile antenna is capable of reception and transmission for C-band, X-band, Ku-band, K-band and Ka-band configurations.

The ASC Signal 4.9 meter antenna conforms to the highest mechanical design standards and is capable of surviving winds up to 200 km/h (120 mph).

All ASC Signal earth station antennas are backed with a 3 year structural components warranty.

- Easy assembly
- 3 year structural component warranty
- High gain
- Configured for C-band, X-band, Ku-band, K-band and Ka-band transmit and receive
- Available in X-band Low PIM versions

SPECIFICATIONS

4.9 Meter Quad-Band Earth Station Antenna

Electrical Performance (Specifications below are a sample of some feed performance ranges available - call for specific Specification Data)

	C-band 2-Port Circular Pol Feed		X-band 2-Port Circular Pol Feed		Ku-band 4-Port Linear Pol Feed		Ka-band 4-Port Circular Pol Feed	
	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625- 4.200	5.850- 6.425	7.250- 7.750	7.900- 8.400	10.700- 12.750	13.750- 14.800	20.200- 21.200	30.000- 31.000
Antenna Gain at Midband, dBi	44.70	48.30	50.00	50.70	53.20	55.10	58.10	60.10
Antenna Noise Temperature								
10° Elevation		49 K		69 K		68 K		123 K
30° Elevation		41 K		57 K		53 K		76 K
50° Elevation		38 K		55 K		51 K		67 K
Cross Polarization								
On-Axis	20.7 dB	27.3 dB	21.3 dB	21.3 dB	35.0 dB	35.0 dB	30.0 dB	30.0 dB
Within 1 dB Beamwidth	20.7 dB	27.3 dB	21.3 dB	21.3 dB	27.0 dB	35.0 dB	30.0 dB	30.0 dB
Axial Ratio	1.20 dB	0.75 dB	1.50 dB	1.50 dB			0.50 dB	0.50 dB
VSWR Performance	1.30:1	1.30:1	1.30:1	1.30:1	1.35:1	1.35:1	1.30:1	1.30:1
Port-to-Port Isolation								
Rx/Tx	0 dB	50 dB	0 dB	20 dB	0 dB	50 dB	0 dB	50 dB
Tx/Tx	85 dB	0 dB	20 dB	0 dB	85 dB	0 dB	85 dB	0 dB
Waveguide Interface Flange	CPR-229 G	CPR-137 G	CPR-229G	CPR-137G	WR-75	WR-75	WR-42	WR-42
Total Power Handling Capability	500 W CW		2 kW CW		1 kW CW		1 kW CW	

Mechanical Performance

Optics Type	Dual Reflector, Gregorian
Reflector Material	Precision Formed Aluminum
Reflector Segments	12
Antenna Pointing Range (Course/Continuous)	
Elevation	0° to 90°
Azimuth	360° (±1-60°)
Polarization	200°

Environmental Performance

Operational Winds	45 mph (72 km/h) Gusts to 65 mph (104 km/h)*
Survival Winds	200 km/h (125 mph) (In Stationary Position)
Rain	102 mm (4 in per hour)
Relative Humidity	100%
Shack and Vibration	As Encountered by Commercial Air, Rail and Truck
Atmospheric Conditions	As Encountered by Moderately Corrosive Coastal and Industrial Areas

NOTE: Specifications provided are for representative feeds.
Other feeds are available for this antenna size.



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All designs, specifications and availabilities of products and services presented in this bulletin are subject to change without notice.

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