



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



4.9 Meter Quad-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 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 and Ka-band transmit and receive

SPECIFICATIONS

4.9 Meter Quad-Band Earth Station Antenna

Electrical Performance

	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
Within 1 dB Beamwidth	20.7 dB		27.3 dB	21.3 dB	21.3 dB		27.0 dB		35.0 dB
Axial Ratio	1.20 dB		0.75 dB	1.50 dB	1.50 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	50 dB	0 dB	50 dB	0 dB	50 dB	
Tx/Tx	85 dB	0 dB	110 dB		0 dB	85 dB		0 dB	85 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%
Shock 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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