

PRODUCT <u>Spec</u>ifications



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

he 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 quadband 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

4.9 Meter Quad-Band Earth Station Antenna

Electrical Performance

		2-Port Pol Feed Transmit	X-band Circular Receive		R	Ku-band Linear P Receive			d 4-Port Pol Feed 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	5	53.20	55.10	58.10	60.10
Antenna Noise Temperature 10° Elevation 30° Elevation 50° Elevation	49 41 38	K	69 57 55	(68 53 51	K	12: 76 67	
Cross Polarization On-Axis Within 1 dB Beamwidth	20.7 dB 20.7 dB	27.3 dB 27.3 dB	21.3 dB 21.3 dB	21.3 dB 21.3 dB		35.0 dB 27.0 dB	35.0 dB 35.0 dB	30.0 dB 30.0 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	1.35:1	1.35:1	1.30:1	1.30:1
Port-to-Port Isolation Rx/Tx Tx/Tx	0 dB 85 dB	50 dB 0 dB	0 dB 110 dB	50 dB 0 dB		0 dB 85 dB	50 dB 0 dB	0 dB 85 dB	50 dB 0 dB
Waveguide Interface Flange	CPR-229 G	CPR-137 G	CPR-229G	CPR-137G	V	WR-75	WR-75	WR-42	WR-42
Total Power Handling Capability	500 W CW		2 kW CW		1	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	5	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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