

PRODUCT
SPECIFICATIONS



The optional pedestal mount allows for motorized applications and features 180 degree azimuth coverage in three continuous overlapping ranges.



4.0 Meter Earth Station Antenna

The ASC Signal 4.0 low-cost earth station antenna provides extremely accurate surface contour, high gain and superior efficiency.

Option of 2 mount types allows versatility in installations. The optional pedestal mount allows for motorized applications and features 180 degree azimuth coverage in three continuous overlapping ranges. This antenna offers an optional low-cost mount utilizing a customer-provided pipe or ASC Signal provided flanged pipe mount. In addition, an optional equipment enclosure is available for mounting RF equipment at the antenna.

- High gain, excellent pattern characteristics. Gregorian Optics
- Self-aligning main reflector - no optical field alignment
- 3-year warranty on all structural components
- Meets U.S. FCC Regulation 25.209 at Ku-band
- ITU-R S.580 and S.465 compliant

SPECIFICATIONS

4.0 Meter Earth Station Antenna

Electrical Performance

	C-band 2-Port Linear Pol Feed		C-band 2-Port Circular Pol Feed		Ku-band 2-Port Linear Pol Feed		Ku-band 4-Port Linear Pol Feed	
	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625-4.200	5.850-6.425	3.625-4.200	5.850-6.425	10.700-12.750	13.750-14.800	10.700-12.750	13.750-14.800
Antenna Gain at Midband, dBi	42.30	46.30	42.30	46.30	51.60	53.10	51.30	52.80
Antenna Noise Temperature								
10° Elevation	9 K		49 K		57 K		67 K	
20° Elevation	41 K		41 K		41 K		53 K	
40° Elevation	38 K		38 K		39 K		50 K	
Cross Polarization								
On-Axis	30.0 dB	30.0 dB	20.7 dB	27.3 dB	35.0 dB	35.0 dB	35.0 dB	35.0 dB
Within 1 dB Beamwidth	28.0 dB	28.0 dB	20.7 dB	27.3 dB	27.0 dB	35.0 dB	27.0 dB	35.0 dB
Axial Ratio		1.20 dB		0.75 dB		0.75 dB		
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/Tx (Rx Frequency)	0 dB	-30 dB	0 dB	50 dB	0 dB	-30 dB	-0 dB	-50 dB
Tx/Rx (Tx Frequency)	-85 dB	0 dB	-85 dB	-0 dB	-40 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-75	WR-75
Total Power Handling Capability	2 kW CW		500 W CW		2 kW CW		1 kW CW	

Mechanical Performance

Optics Type	Dual Reflector, Gregorian
Reflector Material	Precision Formed Aluminum
Reflector Segments	6
Antenna Pointing Range, Course	Elevation (90°) Azimuth (180°) Polarization (360°)

Environmental Performance

Operational Temperature	40°F to 125°F (-40°C to 50°C)
Wind Loading	Operational 45 mph (72 km/h) Gusting to 65 mph (105 km/h) Survival 125 mph (200 km/h) in Any Position
Rain	4 in/hr (102 mm/hr)
Solar Radiation	360 BTU/h/ft ² (1135 W/m ²)
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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ASC-ESA8

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