



3.7 Meter Manual Pipe Mount Earth Station Antenna

The ASC Signal 3.7 meter dual reflector pipe mount antenna features 360 degrees of course azimuth coverage and 0 to 90 degrees of elevation point range. This large range of adjustment provides the ability to view geostationary satellites, horizon to horizon, from any location in the world.

This antenna's pipe mount enables efficient load transfer to the foundation, providing mount rigidity.

The unique Gregorian Optics system and close-tolerance manufacturing techniques provide an extremely accurate surface contour, exceptionally high gain and closely controlled pattern characteristics.

- High gain and excellent pattern characteristics
- Gregorian Optics
- Self-aligning main reflector
- 3 year warranty on all structural components
- Eutelsat Type Approval, EA-A002

SPECIFICATIONS

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Electrical Performance

	C-band 2-Port Circular Pol Feed		C-band 2-Port Linear 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	12.750- 14.500	10.700- 12.750	13.750- 14.800
Antenna Gain at Midband dBi	42.00	45.80	42.70	46.40	51.50	53.30	50.80	52.60
Antenna Noise Temperature								
10° Elevation		42 K		40 K		47 K		70 K
30° Elevation		37 K		36 K		37 K		57 K
50° Elevation		35 K		34 K		34 K		55 K
Cross Polarization On Axis	N/A	N/A	30 dB	35 dB	35 dB	35 dB	35 dB	35 dB
Within 1 dB Beamwidth	N/A	N/A	30 dB	35 dB	35 dB	35 dB	35 dB	35 dB
Axial Ratio	1.50 dB	0.75 dB	N/A	N/A	N/A	N/A	N/A	N/A
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 to Rx		N/A		N/A		N/A		40 dB
Tx to Rx		85 dB		85 dB		40 dB		85 dB
Tx to Tx		N/A		N/A		N/A		40 dB
Waveguide Interface Flange	Brass CPR-137 G	Brass CPR-229G	Brass CPR-229G	Brass CPR-229G	Brass WR75	Brass WR75	Aluminum WR75G	Aluminum WR75G
Tx Power Capacity	500 W		2000 W		2000 W		1000 W/Per Port	

Mechanical Performance

Optics Type	Dual Reflector, Gregorian
Reflector Material	Precision Formed Aluminum
Reflector Segments	2
Antenna Pointing Range, Course	Elevation 0° - 90° Coarse
	Azimuth 180° - 360° Coarse
	Polarization 360° Coarse

Environmental Performance

Operational Temperature	-45.5°C to 52°C (-50°F to 125°F)
Seismic (Earthquakes)	1 G vertical and horizontal acceleration; equivalent to a Richter magnitude of 8.3 and grade 11 on the modified Mercalli scale.
Rain	102 mm (4 in per hour)
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