



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 System

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. The antenna offers an optional low-cost mount utilizing a customer provided pipe mount. In addition, an optional equipment enclosure is available for mounting RF equipment at the antenna.

This antenna is capable of C, X, Ku, and Low PIM

- High gain, excellent pattern characteristics. Gregorian Optics
- Self-aligning main reflector no optional 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 System

Electrical Performance

	C-band 2Port Linear Pol Feed		C-band 2Port Circular Pol Feed		Ku-band 2Port Linear Pol Feed		Ku-band 4Port 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 at Midband	42.30 dB	46.30 dB	42.30 dB	46.30 dB	51.60 dB	53.10 dB	51.30 dB	52.80 dB
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 dB	35 dB	35 dB	35 dB
Within 1 dB Beamwidth	28.0 dB	28.0 dB	20.7 dB	27.3 dB	27 dB	35 dB	27 dB	35 dB
Axial Ratio				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 to Tx (Rx Frequency)	0 dB	-30 dB	0 dB	50 dB	0 dB	-30 dB	-0 dB	-50 dB
Tx to Rx (Tx Frequency)	-85 dB	0 dB	-85 dB	-0 dB	-40 dB	0 dB	-85 dB	0 dB
Waveguide Interface Flange	CPR229 G	CPR-137 G	CPR-229 G	CPR-137 G	WR-75	WR-75	WR-75	WR-75
Tx Power Capacity	2 KW CW		500 W CW		2 KW CW		1 KW CW	

Mechanical Performance

Optics TypeDual Reflector, Gregorian

Reflector MaterialPrecision Formed Aluminum

Reflector Segments6

Antenna pointing Range.....Elevation - 190°
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)

Wind loading (Survival).....125 mph (200 km/h)
In any Position

Rain.....4 inch per hour (102mm)

Solar Radiation.....360 BTU/h/ft² (1135 W/m²)

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



ASC Signal Corporation
1120 Jupiter Road, Suite 102
Plano, TX 75074 USA

Telephone: +1-214-291-7654
Fax +1-214-291-7655
Internet: www.ascsignal.com

All designs, specifications and
availabilities of products and services
presented in this bulletin are subject
to change without notice.
ASC-ESA8
© 2010 ASC Signal Corporation