



## 7.3 Meter Earth Station Antenna

The superior performance of the ASC Signal 7.3 meter earth station antenna makes it an excellent choice for high-density data, voice, communications networks and broadcast applications.

The uniquely formed dual reflector Gregorian system and close-tolerance manufacturing techniques provide an extremely accurate surface contour, exceptionally high gain and closely controlled pattern characteristics. The 7.3 meter 2 or 4-port C-band INTELSAT® Type Approved antennas speed system deployment. Minimal testing and decreased administrative and approval requirements translate directly to cost savings.

- Self-aligning main reflector - No field alignment.
- Rugged aluminum and steel construction.
- 3 Year warranty on structural components.
- Russian Homologation Certificate # OC/1-AO-136.
- INTELSAT® Type Approval, IA032A00, 2-port; IA032B00, 4-port.



## SPECIFICATIONS

### 7.3 Meter Earth Station Antenna

#### Electrical Performance

	C-band 2-Port Circular Pol Feed		C-band 2-Port Linear Pol Feed		C-band 4-Port Circular Pol Feed		C-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	3.625- 4.200	5.850- 6.425	3.625- 4.200	5.850- 6.425
Antenna Gain at Output Flange (dBi $\pm 0.2$ dB)	Frequency							
4.0000 GHz	48.30		48.30		48.30		48.30	
6.1750 GHz	51.60		51.70		51.60		51.60	
Antenna Noise Temperature (Clear Sky Conditions at 68°F (20°C))								
10° Elevation	48 K		42 K		48 K		48 K	
30° Elevation	37 K		31 K		37 K		37 K	
50° Elevation	35 K		29 K		35 K		35 K	
Cross Polarization On Axis	N/A	N/A	N/A	N/A	N/A	N/A	35 dB	35 dB
Within 1 dB Beamwidth	N/A	N/A	N/A	N/A	N/A	N/A	35 dB	35 dB
Axial Ratio	2.3 dB	0.75 dB	N/A	N/A	0.50 dB		0.50 dB	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		20 dB		40 dB	
Tx to Rx	85 dB		85 dB		85 dB		85 dB	
Tx to Tx	N/A		N/A		20 dB		40 dB	
Waveguide Interface Flange	Brass CPR-137 G	Brass CPR-229G	Aluminum CPR-137G	Aluminum CPR-229G	Brass CPR-137G	Brass CPR-229G	Brass CPR-137G	Brass CPR-229G
Tx Power Capacity	500 W		5000 W		2500 W		2500 W	

#### Mechanical Performance

Optics Type	Dual Reflector, Gregorian	
Reflector Material	Precision Formed Aluminum	
Reflector Segments	16	
Mount Type	Tripod Mount	
Antenna Pointing Range	Elevation	5° Coarse, 85° Continuous
	Azimuth	180° Coarse, 120° Continuous
	Polarization	180° Coarse, 180° Continuous
Hub/Enclosure Dimensions	Diameter	1.22 m (48 in)
	Depth	1.17 m (46 in)

#### Environmental Performance

Operational Temperature	-40°C to 52°C (-40°F to 125°F)	
Wind Loading (Survival)	with Motor	200 km/h (125 mph) in Stationary Position
	without Motor	200 km/h (125 mph) in Stationary Position
Wind Loading (Operational)	with Motor	72 km/h (45 mph) with Gusts up to 105 km/h (65 mph)
	without Motor	72 km/h (45 mph) with Gusts up to 105 km/h (65 mph)
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	



ASC Signal Corporation  
1120 Jupiter Road  
Suite 102  
Plano Texas 75074 USA

Telephone: +1-214-291-7654

Internet: [www.ascsignal.com](http://www.ascsignal.com)

All designs, specifications and availabilities of products and services presented in this bulletin are subject to change without notice.

ASC-ESA16

© 2012 ASC Signal Corporation