

PRODUCT SPECIFICATIONS



# 3.7 Meter Dual Reflector Pedestal Mount

he ASC Signal 3.7 meter dual reflector pedestal mount earth station antenna provides extremely accurate surface contour, high gain and superior efficiency.

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

The aluminum hub and hot-dipped galvanized steel mount maintains pointing accuracy and ensures durability and reliability.

- High gain and excellent pattern characteristics
- Gregorian Optics
- Self-aligning main reflector
- 180 mph high wind option (manual antennas)
- 3 year warranty on all structural components
- Eutelsat Type Approval, 2-Port Ku-band EA-A002
- Asiasat Approval, Type 2
- Apstar Approval
- INTELSAT<sub>®</sub> Approval, E-2 at Ku-band: IA12AOO, 2-Port; IA12BOO, 4-Port
- U.S. FCC Regulation 25.209 at Ku-band Approval
- Russian Homologation Certificate OC/1-AO-136



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#### **Electrical Performance**

		nd 2-Port Pol Feed Transmit		d 4-Port Pol Feed Transmit		d 2-Port Pol Feed Transmit		d 4-Port Pol Feed Transmit		d 2-Port Pol Feed Transmit	
Frequency (GHz)	10.700- 12.750	13.750- 14.800	10.700- 12.750	13.750- 14.800	10.700- 12.750	17.300- 18.400	10.700- 12.750	17.300- 18.400	3.625- 4.200	5.850- 6.425	
Insertion Loss dB	0.15	0.20	0.20	0.30	N/A	N/A	0.20	0.30	0.15	0.20	
Gain @ Feed Output Flange (dBi ± 0.	2 dB)										
3.625 GHz	N/A		N/A		N/A		N/A		40.50		
5.850 GHz	N/A		N/A		N/A		N/A		45.30		
10.700 GHz	50.60		50.00		50.50		N/A		N/A		
12.750 GHz	52.10		51.70		51.90		N/A		N/A		
13.750 GHz	52.50		52.20		N/A		N/A		N/A		
14.800 GHz	53.30		53.00		N/A		N/A		N/A		
17.300 GHz	N/A		N/A N/A		N/A		54.20 54.60		N/A N/A		
18.400 GHz	N,	/A	N <sub>j</sub>	'A	r	I/A	5	4.60	N,	'A	
Antenna Noise Temperature 10° Elevation 30° Elevation 50° Elevation	52 K 39 K 37 K		52 K 39 K 37 K		52 K 39 K 37 K		73 K 57 K 54 K		42 K 37 K 35 K		
Port-to-Port Isolation Rx to Rx Tx to Rx	40 dB 40 dB		40 dB 85 dB		40 dB		40 dB 80 dB		85 dB 40 dB		
Waveguide Interface Flange	Brass WR75	Brass WR75	Brass WR75G	Brass WR75G	Brass WR75	Brass WR75	WR75	WR62	CPR-137	CPR-229	
Tx Power Capacity	2000 W		2000 W		1000 W		1000 W/Per Port		500 W	500 W	
Maximum Pressurization	0.50 psi		0.50 psi		0.50 psi		0.50 psi		0.	0.50 psi	

## **Mechanical Performance**

Optics Type	Dual Reflector, Gregorian			
Reflector Material	Precision Formed Aluminum			
Reflector Segments	2			
Hub/Enclosure Dimensions Diameter Depth	1.22 m (48.00 in) 0.61 m (24.00 in)			
Mount Type	Pedestal			
Antenna Pointing Range, Course Elevation	0° - 90° 180° Coarse, 120° Continuous			

## **Environmental Performance**

Operational Temperature	 -45.5°C to 52°C (-50°F to 125°F)
Wind Loading Survival Operation	105 km/h (65 mph) (with or without Motor Drives) 72 km/h (45 mph) with Gusts to 105 km/h (65 mph) (with or without Motor Drives)
Rain	 102 mm (4 in per hour)
Solar Radiation	 360 BTU/hr/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

