

PRODUCT  
SPECIFICATIONS

Detail Photos  
*(from left to right)*  
Manual tripod  
Pedestal mount  
High wind tripod



## 4.5 Meter Pedestal, Manual Tripod and High Wind Tripod Antennas

Used world-wide in high-density data, voice, communications networks and broadcast applications, the ASC Signal 4.5 meter earth station antenna features an exclusively designed 2 or 4-port prime focus, beam-shaping feed and ground plane configuration.

- 3 year warranty on all structural components
- High gain
- Easy assembly
- Russian Homologation Certificate # OC/1-AO-136

This versatile antenna can be configured in transmit and receive or receive only; either linear or circular polarized; C-band, Ku-band, X-band or hybrid C/Ku receive only. The pedestal mount is manual or motorizable. The standard tripod mount is manual only. The high wind tripod mount is motorizable.



## SPECIFICATIONS

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#### Electrical Performance

	C-band 2-Port Circular Pol Feed		C-band 2-Port Linear Pol Feed		C-band 4-Port Linear Pol Feed		Ku-band 2-Port Linear Pol Feed		X-band 2-Port Circular Pol Feed	
	Receive	Transmit	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	10.700-13.250	13.750-14.800	7.250-7.750	7.900-8.400
Antenna Gain at Midband dBi	43.70	46.50	43.80	46.60	43.70	46.50	52.40	53.60	48.20	49.00
Antenna Noise Temperature										
10° Elevation		52 K		47 K		54 K		53 K		45 K
30° Elevation		39 K		34 K		41 K		41 K		34 K
50° Elevation		35 K		30 K		37 K		38 K		29 K
Cross Polarization										
On Axis	N/A	N/A	30 dB	35 dB	30 dB	35 dB	30 dB	35 dB	N/A	N/A
Within 1 dB Beamwidth	N/A	N/A	30 dB	35 dB	30 dB	35 dB	30 dB	35 dB	N/A	N/A
Axial Ratio	2.30 dB	0.75 dB	N/A	N/A	N/A	N/A	N/A	N/A	1.20 dB	1.20 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	1.30:1	1.30:1
Port-to-Port Isolation										
Rx to Rx		N/A		N/A		40 dB		N/A		N/A
Tx to Rx		85 dB		40 dB		85 dB		40 dB		20 dB
Tx to Tx		N/A		N/A		40 dB		N/A		N/A
Waveguide Interface Flange	Brass CPR-229 G	Brass CPR-137G	Aluminum CPR-229 G	Aluminum CPR-137G	Brass CPR-229 G	Brass CPR-137G	Brass WR75	Brass WR75	Aluminum WR112	Aluminum WR112
Tx Power Capacity	500 W		5000 W		2500 W		2000 W		750 W	

#### Mechanical Performance

Optics Type .....	Prime Focus
Reflector Material .....	Precision Formed Aluminum
Reflector Segments .....	6
Mount Type .....	Pedestal Mount, Tripod or High Wind Tripod

#### Environmental Performance

Operational Temperature .....	-45.5°C to 52°C (-40°F to 125°F)
Wind Loading (Survival)	
Pedestal or Tripod Mount .....	with Motor ..... 125 mph (200 km/h) in Stationary Position
	without Motor ..... 125 mph (200 km/h) in Stationary Position
High Wind Tripod Mount .....	with Motor ..... 150 mph (240 km/h) in Stationary Position
	without Motor ..... 150 mph (240 km/h) in Stationary Position
Wind Loading (Operational)	
Pedestal or Tripod Mount ...	with Motor ..... 45 mph (72 km/h) with Gusts up to 65 mph (105 km/h)
	without Motor ..... 45 mph (72 km/h) with Gusts up to 65 mph (105 km/h)
High Wind Tripod Mount .....	with Motor ..... 100 mph (160 km/h) with > 2 dB Signal Loss @ 6 GHz
	without Motor ..... 100 mph (160 km/h) with > 2 dB Signal Loss @ 6 GHz
Rain .....	102 mm (4 in per hour)
Solar Radiation .....	1135 Watts/m <sup>2</sup> (360 BTU/h/ft <sup>2</sup> )
Relative Humidity .....	100%
Shock and Vibration .....	As Encountered by Commercial Air, Rail and Truck Shipment
Atmospheric Conditions .....	As Encountered by Moderately Corrosive Coastal and Industrial Areas



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