



ASC Signal ESAs provide maximum durability with minimal maintenance.



9.3 Meter Dual Reflector Earth Station Antenna

Now telecommunications and television system operators, integrators and designers can bring their systems on line faster, more economically, and with superior performance with the ASC Signal 9.3 meter Earth Station Antenna (ESA)

In use around the world in broadcast applications and high-density data, voice, communications networks, the ASC Signal 9.3 meter ESA features a computer-optimized dual reflector Gregorian system coupled with independently adjustable reflector panels and trusses and close-tolerance manufacturing techniques. This combination provides extremely accurate surface contour, exceptionally high gain, superior efficiency, and closely controlled pattern characteristics. Additionally, the elevation-over-azimuth mount enables horizon-to-horizon coverage from any worldwide location. ASC Signal ESAs provide maximum durability with minimal maintenance. The hot-dipped galvanized steel ground mount assembly ensures extended product life.


Galvanized and stainless steel hardware maximizes corrosion resistance. A variety of options are available for cost effective system expansion, including two or four port linear or circular polarized combining networks, programmable control systems, feed rotation systems, maintenance platforms, professionally designed and documented cross-axis waveguide kits, and pressurization systems. Microprocessor and steptrack controls are also available for motorized antennas.

- High gain, excellent pattern characteristics
- Horizon to horizon coverage with elevation over azimuth mount
- Advanced Gregorian optics
- Intelsat B compliant

SPECIFICATIONS

9.3 Meter Dual Reflector 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 Midband	50.40 dB		53.80 dB	50.40 dB	53.90 dB		53.70 dB		53.80 dB
Antenna Noise Temperature (Clear Sky Conditions at 68°F (20°C))									
10° Elevation	39 K		39 K		43 K		35 K		
30° Elevation	29 K		29 K		33 K		35 K		
50° Elevation	27 K		27 K		31 K		23 K		
Axial Ratio	1.20 dB		0.75 dB	1.50 dB	1.50 dB		0.50 dB		0.50 dB
VSWR Performance	1.30:1	1.30:1	1.30:1	1.30:1	1.35:1	1.35:1	1.30:1	1.30:1	
Port-to-Port Isolation									
Rx/Tx	≥85 dB		≥85 dB		40 dB		40 dB		
Tx/Tx					≥85 dB		≥85 dB		
Waveguide Interface Flange (Tx Port)	CPR-229 G		CPR-137 G	CPR-229G	CPR-137G	CPR-229G	CPR-137G	CPR-229G	
Tx Power Capacity	500 W		5000 W		1500 W per Port		2500 W		
Maximum Pressurization	0.05 psi		0.50 psi		0.50 psi		0.50 psi		

Mechanical Performance

Optics Type	Dual Reflector, Gregorian	
Reflector Material	Precision Formed Aluminum	
Reflector Segments	20	
Mount Type	Tripod with Elevation Over Azimuth	
Antenna Pointing Range	Elevation	0 - 90° Coarse, 90° Continuous
	Azimuth	180° Coarse, 120° Continuous
	Polarization	180° Coarse, 180° Continuous
Hub/Enclosure Dimensions	Diameter	2.31 m (84 in)
	Depth	1.17 m (46 in)

Environmental Performance

Operational Temperature	-40°C to 50°C (-40°F to 125°F)	
Wind Loading	Operational	72 km/h (45 mph) to 105 km/h (65 mph) (with Motor Drives)
	Survival	200 km/h (125 mph) (Any Position)
Rain	102 mm (4 in per hour)	
Solar Radiation	1135 Watts/m ² (360 BTU/h/ft 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	

Specifications provided are for representative feeds. Other feeds are available for this antenna size.



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

Telephone: +1-214-291-7654

Internet: www.ascsignal.com

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

ASC-ESA20
© 2012 ASC Signal Corporation