PRODUCT SPECIFICATIONS

9.3 Meter Dual Reflector Earth Station Antenna

ASC Signal ESAs provide maximum durability with minimal maintenance.

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					40 dB		40 dB	
Tx/Tx	≥85 dB		≥85 dB		≥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	CPR-137G-42
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/m2 (360 BTU/h/ft2)

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.

ascSignal™
Connecting The World

ASC Signal Corporation
620 North Greenfield Parkway
Garner, NC 27529 USA

Telephone: +1-919-329-8700
Fax: +1-919-329-8701

Internet: www.ascsignal.com

ASC-ESA20