

**PRODUCT  
SPECIFICATIONS**

Detail Photo  
*(on right)*  
DASR pedestal in stand



These antennas and pedestals are manufactured to stringent specifications and perform to the exacting standards demanded of them.

## S-band Air Traffic Control Radar Antenna System

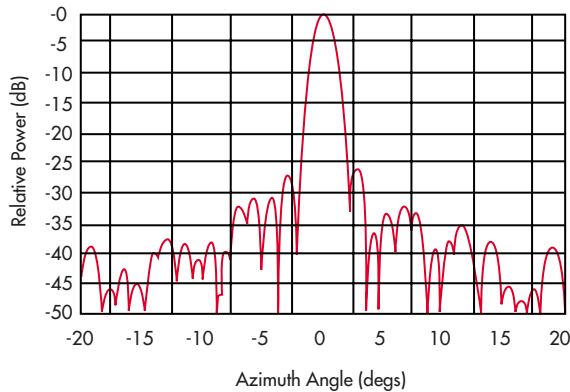
The ASC Signal S-band Radar Antenna was designed with the latest state-of-the-art software to generate the reflector profiles, and uses the latest technology for the feed system.

The dual drive pedestal rotator is designed to support the primary and large vertical array secondary radar antenna. These antennas and pedestals are manufactured to stringent specifications and perform to the exacting standards demanded of them. ASC Signal has invested in extensive manufacturing tooling to ensure repeatability in production. The ASC Signal Corporation S-band Primary Surveillance Radar Antenna is a widely deployed advanced antenna with a proven record of performance and reliability. Drawing on its renowned advanced antenna and pedestal design techniques, ASC Signal fabricates these surveillance radar antennas and pedestals with proven performance advantages. Choose the ASC Signal advantage for your next radar system. Complete system solution with rotary joint is also available.

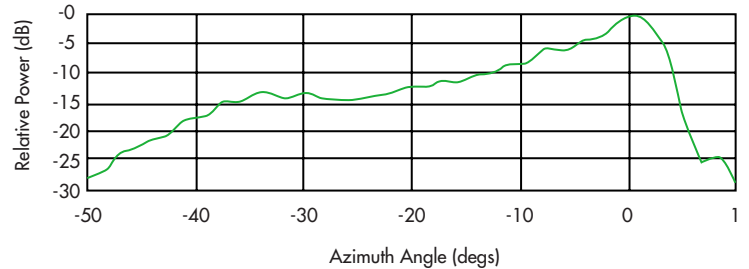
- High gain
- High and low radiating beams
- Instantaneous polarization switching
- Weather channel included
- Elevation coverage to 40 degrees
- Meets ICAO (International Civil Aviation Organization) environmental specifications
- Dual drive pedestal system
- Viton® seals
- Interlock stow pins
- Operational without need of a radome
- Optional rotary joint to provide a complete system solution

## SPECIFICATIONS

### S-band Air Traffic Control Radar Antenna System



Typical Low Beam Azimuth Pattern at 2.8 GHz



Typical Low/High Beam Elevation Pattern at 2.8 GHz

#### Electrical Performance

Frequency Band .....	2.7-2.9 GHz
Gain (min) High Beam .....	32 dBi
Low Beam .....	34 dBi
Polarization .....	Switchable Circular/Linear
VSWR .....	1.3 to 1
Beamwidth, degrees	
Elevation (nom) .....	7.7
Azimuth (nom) .....	1.4.

#### Mechanical Performance

Feed Type .....	Prime focus offset feed system aluminum chromate converted per MIL-C-5541C
Flange Type .....	CPR284 at output
Reflector Type .....	Three pieces formed aluminum mesh chromate converted per MIL-C5541C
Wind Loading	
Operational .....	140 km/hr with 1 cm ice on non-radiating surface
Survival .....	240 km/hr with 4 cm ice

#### Pedestal Performance

Motors, Dual Drive hp .....	15
Rotation Rate, rpm, selectable .....	12-15 Motor
Frequency, Hz .....	50/60 Motor
Voltage .....	208/380/415
Peak Torque .....	17,000 ft lb
Overturning Moment .....	106,000 ft lb

Call today for pricing and interface details for your application.  
ASC Signal also supplies custom design, system integration, field installation, and test services.

#### Environmental

Temperature .....	-50°C to +70°C
Rain .....	4 in (102 mm) per hour
Solar Radiation .....	360 BTU/hr/ft <sup>2</sup> (1135 Watts/m <sup>2</sup> )
Relative Humidity .....	100%

#### Available Options

Rotary Joint  
Slip Rings  
Motor Control Unit  
Ladder Kit  
Obstruction Lighting

#### Shipping Information

Antenna	
Weight	
Net .....	2,640 kg
Gross .....	3,300 kg
Dimensions (l x w x h) .....	13.3 ft x 13.8 ft x 16.6 ft (reflector surface) (4.05 m x 4.20 m x 5.06 m)

Transportable via a single closed 40 ft (12.2 m) ISO container

Pedestal	
Weight	
Net .....	4,560 kg (10,030 lb)
Gross .....	4,886 kg (10,750 lb)
Dimensions (l x w x h) .....	7.7 ft x 7.7 ft x 8.1 ft (2.3 m x 2.3 m x 2.4 m)



ASC Signal Corporation

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.