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

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

**Product Specifications**

Detail Photo
(on right)
DASR pedestal in stand

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

**SPEcifications**

**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

**Electrical Performance**

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

**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

**Environmental**

- **Temperature**: -50ºC to + 70ºC
- **Rain**: 4 in (102 mm) per hour
- **Solar Radiation**: 360 BTU/hr/ft² (1135 Watts/m²)
- **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)**
    - **(reflector surface)**: 13.3 ft x 13.8 ft x 16.6 ft
    - **(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)**
    - **(2.3 m x 2.3 m x 2.4 m)**

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

ASC Signal Corporation

Internet: www.ascsignal.com

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