



7.3 Meter Earth Station Antenna

The superior performance of the ASC Signal 7.3 meter earth station antenna makes it an excellent choice for high-density data, voice, communications networks and broadcast applications.

The uniquely formed dual reflector Gregorian system and close-tolerance manufacturing techniques provide an extremely accurate surface contour, exceptionally high gain and closely controlled pattern characteristics. The 7.3 meter 2 or 4-port C-band INTELSAT® Type Approved antennas speed system deployment. Minimal testing and decreased administrative and approval requirements translate directly to cost savings.

- Self-aligning main reflector - No field alignment.
- Rugged aluminum and steel construction.
- 3 Year warranty on structural components.
- Russian Homologation Certificate # OC/1-AO-136.
- INTELSAT® Type Approval, IA032A00, 2-port; IA032B00, 4-port.



SPECIFICATIONS

7.3 Meter 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 Output Flange (dBi ±0.2 dB) Frequency | | | | | | | | |
| 4.0000 GHz | 48.30 | | 48.30 | | 48.30 | | 48.30 | |
| 6.1750 GHz | 51.60 | | 51.70 | | 51.60 | | 51.60 | |
| Antenna Noise Temperature (Clear Sky Conditions at 68°F (20°C)) | | | | | | | | |
| 10° Elevation | 48 K | | 42 K | | 48 K | | 48 K | |
| 30° Elevation | 37 K | | 31 K | | 37 K | | 37 K | |
| 50° Elevation | 35 K | | 29 K | | 35 K | | 35 K | |
| Cross Polarization On Axis | N/A | N/A | N/A | N/A | N/A | N/A | 35 dB | 35 dB |
| Within 1 dB Beamwidth | N/A | N/A | N/A | N/A | N/A | N/A | 35 dB | 35 dB |
| Axial Ratio | 2.3 dB | 0.75 dB | N/A | N/A | 0.50 dB | 0.50 dB | N/A | N/A |
| 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 |
| Port-to-Port Isolation | | | | | | | | |
| Rx to Rx | N/A | | N/A | | 20 dB | | 40 dB | |
| Tx to Rx | 85 dB | | 85 dB | | 85 dB | | 85 dB | |
| Tx to Tx | N/A | | N/A | | 20 dB | | 40 dB | |
| Waveguide Interface Flange | Brass CPR-137 G | Brass CPR-229G | Aluminum CPR-137G | Aluminum CPR-229G | Brass CPR-137G | Brass CPR-229G | Brass CPR-137G | Brass CPR-229G |
| Tx Power Capacity | 500 W | | 5000 W | | 2500 W | | 2500 W | |

Mechanical Performance

| | | |
|--------------------------|---------------------------|------------------------------|
| Optics Type | Dual Reflector, Gregorian | |
| Reflector Material | Precision Formed Aluminum | |
| Reflector Segments | 16 | |
| Mount Type | Tripod Mount | |
| Antenna Pointing Range | Elevation | 5° Coarse, 85° Continuous |
| | Azimuth | 180° Coarse, 120° Continuous |
| | Polarization | 180° Coarse, 180° Continuous |
| Hub/Enclosure Dimensions | Diameter | 1.22 m (48 in) |
| | Depth | 1.17 m (46 in) |

Environmental Performance

| | | |
|----------------------------|---|---|
| Operational Temperature | -40°C to 52°C (-40°F to 125°F) | |
| Wind Loading (Survival) | with Motor | 200 km/h (125 mph) in Stationary Position |
| | without Motor | 200 km/h (125 mph) in Stationary Position |
| Wind Loading (Operational) | with Motor | 72 km/h (45 mph) with Gusts up to 105 km/h (65 mph) |
| | without Motor | 72 km/h (45 mph) with Gusts up to 105 km/h (65 mph) |
| Rain | 102 mm (4 in per hour) | |
| 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 | |



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

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