

Type 183: 1.8M C-band Circular Polarized Rx/Tx Class III Antenna System



- All materials comply with EU directive No. 2011/65/EC (RoHS).
- One-piece precision offset thermoset-molded reflector.
- Heavy-duty galvanized Az/El mount.
- Fine Azimuth and elevation adjustments.
- Galvanised support arm and alignment struts.
- Factory pre-assembled mount.
- Plated hardware for maximum corrosion resistance.
- RF tested feed assembly



1.8m C-band Circular Polarized Rx/Tx Class III Antenna System TYPE 183

The **Skyware Global Type 183 1.8 m Class III RxTx Antenna** is a rugged commercial grade product suitable for the most demanding applications. The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector is a network of support ribs which not only strengthens the antenna, but also helps to sustain the critical parabolic shape necessary for transmit performance.

The Az/El mount is constructed from heavy-gauge steel to provide a rigid support to the reflector and feed support arm. Heavy-duty lockdown bolts secure the mount to any 114 mm (4.50") O.D. mast and prevent slippage in high winds.



- Hot-dip galvanizing is standard on this model for maximum environmental protection.
- Heavy-duty Class III mount for 11 kg (25 lb) RF electronics (LNB & BUC).



• PRODUCT SPECIFICATIONS

Type Approval Information

Antenna Model.62-1833911L/R

Intelsat Standard. Standard G & H-2 (IESS 601)

Approval Code. IA050A00
(See Our Website for a Complete List of Type Approvals)

RF Performance

Effective Aperture. 1.8 m (71 in)

Operating Frequency
Tx5.850 - 6.425 GHz
Rx3.625 - 4.200 GHz

Polarization. Circular; Tx LH, Rx RH; or Tx RH, Rx LH

Gain (± 4 dBi)
Tx 39.5 dBi @ 6.1 GHz
Rx 35.4 dBi @ 3.9 GHz

3 dB Beamwidth
Tx 2.0° @ 6.1 GHz
Rx 3.0° @ 3.9 GHz

Sidelobe Envelope (Tx, Co-Pol dBi)
2.8° < θ < 20° 29 - 25 Log θ
20° < θ < 26.3° -3.5
26.3° < θ < 48° 32 - 25 Log θ
48° < θ < 180° -10

Axial Ratio
Tx 1.3 VAR (2.3 dB)
Rx 1.3 VAR (2.3 dB)

Antenna Noise Temperature
10° El. 41° K
20° El. 36° K
30° El. 33° K

VSWR
Tx 1.3:1
Rx 1.5:1

Isolation (Port to Port)
Tx 80dB
Rx 60 dB

Feed Interface
Tx CPR-137
Rx CPR-229
(All specifications typical)

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Mechanical Performance

Reflector Material.Glass Fiber Reinforced Polyester

Antenna OpticsOne-Piece Offset Feed Prime Focus

Mount Type. Elevation over Azimuth

Elevation Adjustment Range 10° - 90° Continuous
Fine Adjustment

Azimuth Adjustment Range 360° Continuous
 $\pm 10^\circ$ Fine Adjustment

Feed Support. Rectangular Section with Alignment Legs

Mast Pipe Interface.114 mm (4.5 in) Diameter

Environmental Performance

Wind Loading
Operational. 80 km/h (50 mph)
Survival. 200 km/h (125 mph)

Temperature. -50°C to 80°C

Humidity. 0 to 100% (Condensing)

Atmosphere. Standard Hardware Meets (ASTM B-117)

Solar Radiation. 360 BTU/h/ft²

Shock and Vibration. As Encountered During
Shipping and Handling



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