2.4 m Ku-band RxTx Class III Antenna System

TYPE 243

The Skyware Global Type 243 2.4 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 maintain its 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 168 mm (6.63”) O.D. mast and prevent slippage in high winds.

Hot-dip galvanizing is standard on this model for maximum environmental protection.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- Two-piece precision offset thermoset-molded reflector.
- Heavy-duty galvanized Az/El mount.
- Fine Azimuth and elevation adjustments.
- Galvanized support arm and alignment struts.
- Factory pre-assembled mount.
- Plated hardware for maximum corrosion resistance.
- Includes Ku-band linear cross-polarized RxTx feed assembly.
- Heavy-duty Class III mount for 11 kg (25 lbs) RF electronics (LNB & BUC).
**Type Approval Information**

- **Antenna Model**: 62-2435611
- **Intelsat Standard**: Standard G & K3 (IESS 601)
- **Approval Code**: U057800

*(See Our Website for a Complete List of Type Approvals)*

**Mechanical Performance**

- **Reflector Material**: Glass Fiber Reinforced Polyester
- **Antenna Optics**: Two-Piece Offset Feed Prime Focus
- **Mount Type**: Elevation over Azimuth
- **Elevation Adjustment Range**: 10° - 90° Continuous Fine Adjustment
- **Azimuth Adjustment Range**: 360° Continuous ±12° Fine Adjustment
- **Feed Support**: Rectangular Section with Alignment Legs
- ** mast Pipe Interface**: 1.68 mm (6.63 in) Diameter
- **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 500 Hour Salt Spray Test Requirements (ASTM B-117)
- **Solar Radiation**: 360 BTU/ft²/hr
- **Shock and Vibration**: As Encountered During Shipping and Handling

**RF Performance**

- **Effective Aperture**: 2.4 m (96 in)
- **Operating Frequency**
  - Tx: 13.75 - 14.50 GHz
  - Rx: 10.70 - 12.75 GHz
- **Polarization**: Linear, Orthogonal
- **Gain (±2 dB)**
  - Tx: 48.9 dBi @ 14.3 GHz
  - Rx: 47.4 dBi @ 12.0 GHz
- **3 dB Beamwidth**
  - Tx: 0.59° @ 14.3 GHz
  - Rx: 0.71° @ 12.0 GHz
- **Sidelobe Envelope (Tx, Co-Pol dB)**
  - 1° < θ < 20°: 29 - 25 Log θ
  - 20° < θ < 26.3°: -3.5
  - 26.3° < θ < 48°: -32 - 25 Log θ
  - 48° < θ < 180°: -10
- **Antenna Cross-Polarization**: 30 dB on Axis
- **Antenna Noise**
  - 10° El: 55° K
  - 20° El: 46° K
  - 30° El: 45° K
- **VSWR**:
  - Tx: 1.3:1
  - Rx: 1.5:1
- **Isolation (Port to Port)**
  - Tx: 80 dB
  - Rx: 35 dB
- **Feed Interface**
  - Tx: WR75 Flat Flange
  - Rx: WR75 Flat Flange

*(All specifications typical)*