

## PRODUCT SPECIFICATIONS

Detail Photos

*(on right from top to bottom)*

Heavy-duty galvanized Az/El Mount

Fine azimuth and elevation adjustments

RF tested Ku-band linear polarized feed assembly



Type approved for use on  
Intelsat satellite system



## 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

- 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 lb) RF electronics (LNB & BUC).

## SPECIFICATIONS

### Type 243 2.4 m Ku-band RxTx Class III Antenna System

#### Type Approval Information

Antenna Model	62 - 2435611
Intelsat Standard	Standard G & K-3 (IESS 601)
Approval Code	IA057B00

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

#### 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 ( $\pm 2$ dBi)	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 dBi)	1° < $\theta$ < 20° ..... 29 - 25 Log $\theta$ 20° < $\theta$ < 26.3° ..... -3.5 26.3° < $\theta$ < 48° ..... 32 - 25 Log $\theta$ 48° < $\theta$ < 180° ..... -10
Antenna Cross-Polarization	30 dB on Axis 26 dB in .5 dB Contour
Antenna Noise Temperature	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)

#### 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 $\pm 12^\circ$ Fine Adjustment
Feed Support	Rectangular Section with Alignment Legs
Mast Pipe Interface	168 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/h/ft <sup>2</sup>
Shock and Vibration	As Encountered During Shipping and Handling

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