

### 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





The ASC Signal 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.

**TYPE 243** 

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 thermosetmolded reflector.
- Heavy-duty galvanized Az/El mount.
- Fine Azimuth and elevation adjustments.
- Galvanized support arm and alignment struts.
- Factory pre-assembled mount.
- Galvanized and stainless hardware for maximum corrosion resistance.
- Includes Ku-band linear crosspolarized RxTx feed assembly.
- Heavy-duty Class III mount for 11 kg (25 lb) RF electronics (LNB & BUC).

# 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 10.70 - 12.75 GHz
Polarization		Linear, Orthogonal
Gain (±.2 dBi)	Tx	48.9 dBi @ 14.3 GHz 47.4 dBi @ 12.0 GHz
3 dB Beamwidth	.Tx	0.59° @ 14.3 GHz 0.71° @ 12.0 GHz
Sidelobe Envelope (Tx, C	20-Pol dBi) 1° <⊖< 20° 20° <⊖< 26.3° 26.3° <⊖< 48° 48° <⊖< 180°	29 - 25 Log ↔ -3.5 32 - 25 Log ↔ -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 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 Ran	ge	10° - 90° Continuous Fine Adjustment
Azimuth Adjustment Ranç	ge	360° Continuous ±12° Fine Adjustment
Feed Support		Rectangular Section with Alignment Legs
Mast Pipe Interface		168 mm (6.63 in) Diameter
Wind Loading	Operational Survival	80 km/h (50 mph) 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/ft²
Shock and Vibration		As Encountered During Shipping and Handling



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