

**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



2.4 m Ku-band RxTx Class III Antenna System

TYPE 243

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.

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.
- Galvanized and stainless 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).

Type approved for use on
Intelsat satellite system



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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	IA057800

(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 (± 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° < 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 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 $\pm 12'$ 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 ²
Shock and Vibration	As Encountered During Shipping and Handling



ASC Signal Corporation

USA

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ASC-VSAT53.1

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