

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 (± 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 $\pm 12^\circ$ 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 ²
Shock and Vibration	As Encountered During Shipping and Handling

