

**PRODUCT SPECIFICATIONS**

Detail Photos

*(on right from top to bottom)*

Pre-assembled Precision Az/EI Mount

Low Cross-Pol Feed Assembly



## 96 cm RxTx Class I Antenna System TYPE 961

The antenna features a unique feed which provides cross-pol performance that exceeds industry standards.

The Skyware Global Type 961 96 cm Class I 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 strengthens the antenna and sustains its critical parabolic shape necessary for transmit performance. The reflector optics feature a long focal length for excellent cross-pol performance.

The heavy gauge steel Az/EI mount provides a rigid support to the reflector. This mount secures the antenna to any 73-76 mm (2.88"-3.00") O.D. mast and prevents slippage in high winds. A special powder paint process offers protection from weather-related corrosion.

The antenna features a unique feed which provides cross-pol performance that exceeds industry standards.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece precision offset thermoset-molded reflector.
- Long focal length optics for low cross-pol performance.
- Available with Ku-Band co-pol or cross-pol feeds.
- Galvanized 19 mm (.75") O.D. feed support legs for lightweight outdoor units (ODU's).
- Plated hardware for maximum corrosion resistance
- Az/EI mount includes both elevation and azimuth fine adjustments
- Class I system designed for typical 1 W and 2 W Ku-band RF Electronics\*

\* 1.7 kg or 3.7 lb max. weight (For BUC and INB)  
1.9 kg or 4.2 lb max. weight (For Transceiver)



## SPECIFICATIONS

### Type 961 96 cm RxTx Class I Antenna System

#### Type Approval Information

Antenna Model	62-9615401
Eutelsat Standard	VSAT
Approval Code	EA-V051

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

#### RF Performance

Effective Aperture	96 cm (38 in)
Operating Frequency	Tx 13.75 - 14.50 GHz Rx 10.70 - 12.75 GHz
Polarization	Linear, Orthogonal (Co-Pol Optional)
Gain ( $\pm 2$ dBi)	Tx 41.2 dBi @ 14.3 GHz Rx 39.7 dBi @ 12.0 GHz
3 dB Beamwidth	Tx 1.5° @ 14.3 GHz Rx 1.8° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	1.8° < $\theta$ < 20° 29 - 25 Log $\theta$ 20° < $\theta$ < 26.3° -3.5 26.3° < $\theta$ < 48° 32 - 25 Log $\theta$ 48° < $\theta$ < 180° -10 (Typical)
Antenna Cross-Polarization	>30 dB in 1 dB Contour
Antenna Noise Temperature	10° El 53° K 20° El 39° K 30° El 32° K
VSWR	Tx 1.3:1 Rx 1.5:1
Isolation (Port to Port)	Tx 90 dB Rx >40 dB
Feed Interface	Tx WR75 Flat Flange Rx WR75 Flat Flange

(All specifications typical)

#### Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester
Antenna Optics	One-Piece Offset Feed Prime Focus
Mount Type	Elevation over Azimuth
Elevation Adjustment Range	5° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous; $\pm 5^\circ$ Fine Adjustment
Mast Pipe Interface	73 - 76 mm (2.88 in - 3.00 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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