

Type 756: 75cm Rx/Tx Ku-Band Elliptical LFL Antenna System



- ISO 9001:2008 Certificate of Registration
- All materials comply with EU Directive No. 2002/95/EC (RoHS).
- One-piece precision elliptical offset thermoset-molded reflector.
- Long Focal Length optics for low cross-pol performance.
- Fine azimuth and elevation adjustment.
- Rigid steel feed support arm.
- Factory assembled Az/EI/Skew mount for optimum alignment capability.
- Plated hardware for maximum corrosion resistance.
- Includes Rx/Tx feed assembly.



The **Skyware Global 75cm Rx/Tx Ku-Band Elliptical LFL 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 sustain the critical parabolic shape necessary for transmit performance.
- The Az/EI/Skew mount, constructed from heavy-gauge galvanized steel, provides a rigid support to the reflector.
- The mount secures the antenna to any 60mm (2.38") O.D. mast and prevents slippage in high winds.
- The Az/EI/Skew mount allows for precise alignment of the elliptical reflector to the geostationary arc, taking full advantage of the antenna's performance.



• PRODUCT SPECIFICATIONS

RF Performance

Effective Aperture.75cm equivalent (30in)

Operating Frequency

TX 14.00-14.50GHz
RX 10.70-12.75GHz

Polarization Linear, Orthogonal

Gain (± 0.2 dB)

TX 39.1 dBi @ 14.3GHz
RX 37.6 dBi @ 12.0GHz

3 dB Beamwidth

TX 1.4° @ 14.3GHz
RX 1.7° @ 12.0GHz

Sidelobe Envelope (Tx, Co-Pol dBi)

1.5° < θ < 7° 29-25 log θ dBi
7° < θ < 9.2° +8 dBi
9.2° < θ < 48° 32-25 log θ dBi
48° < θ < 180° -10

Antenna Cross-Polarization. 32db on Axis

Antenna Noise Temperature ¹

62° EL 50K

VSWR

TX 1.3:1
RX 1.4:1

Isolation (Port to Port)

TX 30db
80db (with optional TRF)
RX 30db

Feed Interface

TX WR75
RX WR75

(All specifications typical)

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Mechanical Performance

Reflector Material. Glass Fiber Reinforced Polyester

Antenna Optics One-Peice Offset Feed Prime Focus

Mount Type Three Axis, Skew, Elevation and Azimuth

Polarization (Skew) Adjustment Range . . . $\pm 90^\circ$ Continuous

Elevation Adjustment Range 5°-90° Continuous
Fine Adjustment

Azimuth Adjustment Range 360° Continuous
 $\pm 5^\circ$ Fine Adjustment

Mast Pipe Interface. 60 mm(2.38 in)Diameter

Enviromental Performance

Wind Loading

Operational. 50 mph (80 km/h)

Functional Survival 80 mph (128 km/h)

Ultimate Survival 125 mph (200 km/h)

Operational Temperature. -40°C to +60°C

Survival Temperature. -50°C to +80°C

Humidity. 0 to 100% (Condensing)

Atmosphere. Standard Hardware 500 Hrs
SST Requirements (ASTM B-117)

Solar Radiation 360 BTU/h/ft²

Shock and Vibration. As Encountered during
Shipping and handling



Satcom solutions for the long haul



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