

**PRODUCT  
SPECIFICATIONS**

Detail Photos

*(on right from top to bottom)*

Pre-assembled Az/El/Skew  
Mount with fine-elevation ad-  
justment and stamped degree  
scale

RxTx feed assembly

The reflector is thermoset-  
molded for strength and  
surface accuracy.



## 75 cm LFL RxTx Elliptical Antenna System

### TYPE 756

**T**he Skyware Global Type 756 75 cm LFL RxTx Elliptical 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/El/Skew mount, constructed from heavy-gauge galvanized steel, provides a rigid support to the reflector. The mount secures the antenna to any 60 mm (2.38") O.D. mast and prevents slippage in high winds. In addition, the Az/El/Skew mount allows for precise alignment of the elliptical reflector to the geostationary arc, taking full advantage of the antenna's performance.

- 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/El/Skew mount for optimum alignment capability.
- Plated hardware for maximum corrosion resistance.
- Includes RxTx feed assembly.

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#### RF Performance

Effective Aperture	75 cm equivalent (30 in)
Operating Frequency	Tx 14.00 - 14.50 GHz Rx 10.70 - 12.75 GHz
Polarization	Linear, Orthogonal
Gain ( $\pm 2$ dBi)	Tx 39.1 dBi @ 14.3 GHz Rx 37.6 dBi @ 12.0 GHz
3 dB Beamwidth	Tx 1.4° @ 14.3 GHz Rx 1.7° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	1.5° < $\theta$ < 7° 29 - 25 Log $\theta$ 7° < $\theta$ < 9.2° +8 9.2° < $\theta$ < 48° 32 - 25 Log $\theta$ 48° < $\theta$ < 180° -10 (Typical)
Antenna Cross-Polarization	32 dB on Axis
Antenna Noise Temperature	62° K $\pm 5^\circ$ K
VSWR	Tx 1.3:1 Rx 1.4:1
Isolation (Port to Port)	Tx 30 dB 80 dB (with optional TRF) Rx 30 dB
Feed Interface	Tx WR75 Rx WR75

(All specifications typical)

#### Mechanical Performance

reflector Material	Glass Fiber Reinforced Polyester
Antenna Optics	One-Piece Offset Feed Prime Focus
Mount Type	Three Axis, Skew, Elevation and Azimuth
Polarization (Skew) Adjustment Range	$\pm 90^\circ$ Continuous
Elevation Adjustment Range	2° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous, $\pm 5^\circ$ Fine Adjustment
Mast Pipe Interface	60 mm (2.38 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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