

**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		84 cm equivalent (33 in) (70 cm x 100 cm Elliptical Aperture)
Operating Frequency	Tx	13.75 - 14.50 GHz
	Rx	10.95 - 12.75 GHz
Polarization		Linear, Orthogonal
Gain ( $\pm 2$ dBi)	Tx	40.3 dBi @ 14.3 GHz
	Rx	38.8 dBi @ 12.0 GHz
3 dB Beamwidth	Tx	1.5° @ 14.3 GHz
	Rx	1.9° @ 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
Antenna Cross-Polarization		30 dB on Axis
Antenna Noise Temperature	30° El	48° 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		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

