SKYware GLOBAL

PRODUCT SPECIFICATIONS

Detail Photos
(on right from top to bottom)
Pre-assembled Az/El Mount
Fine-elevation adjustment with stamped degree scale
Ku RxTx Cross-Pol Feed Assembly shown

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

75 cm RxTx Elliptical Antenna System

TYPE 755TX

The Skyware Global Type 755TX 75 cm 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 strengthens the antenna and sustains the parabolic shape necessary for transmit performance.

The heavy-gauge galvanized steel Az/El/Skew mount provides 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. This mount allows for precise alignment of the elliptical reflector to the geostationary arc. A special powder paint process offers excellent protection from weather-related corrosion.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece precision elliptical offset thermoset-molded reflector.
- Single bolt fine elevation adjustment.
- Extruded aluminum feed support arm.
- Pre-assembled Az/El/Skew mount for optimum alignment capability.
- Plated hardware for maximum corrosion resistance.
- Includes RxTx feed assembly.
- Available with Co-Pol or Cross-Pol feed.
- Designed for typical 1 W and 2 W Ku-band Block Up-Converters (BUCs)*

** 2 kg or 4.5 lb or max. weight for RF electronics (BUC and LNB)*

SPECIFICATIONS

Type 755TX 75 cm RxTx Elliptical Antenna System

RF Performance

Effective Aperture		75 cm equivalent (30 in) (62 cm x 89 cm Elliptical Aperture)
Operating Frequency	Tx	13.75 - 14.50 GHz
	Rx	10.70 - 12.75 GHz
Polarization		Linear, Co or Cross-Polarized
Gain (±.2 dBi)	Tx	39.3 dBi @ 14.3 GHz
	Rx	37.8 dBi @ 12.0 GHz
3 dB Beamwidth	Tx	1.6° @ 14.3 GHz
	Rx	2.0° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)		
	$1.8^\circ < \theta < 20^\circ$	29 - 25 Log θ
	$20^\circ < \theta < 26.3^\circ$	-3.5
	$26.3^\circ < \theta < 48^\circ$	32 - 25 Log θ
	$48^\circ < \theta < 180^\circ$	-10
Antenna Cross-Polarization		30 dB on Axis
Antenna Noise Temperature	30° El	50° 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 Prime Focus
Mount Type		Three Axis, Skew, Elevation and Azimuth
Polarization (Skew) Adjustment Range		±90° Continuous
Elevation Adjustment Range		5° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range		360° Continuous
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^2
Shock and Vibration		As Encountered During Shipping and Handling

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