



**PRODUCT SPECIFICATIONS**

Detail Photos

*(on right from top to bottom)*

Pre-assembled Az/EI Mount

RF tested Ku-band feed assembly

Type approved for use on Intelsat and Eutelsat satellite systems



# 1.2 m RxTx Class II Antenna System

## TYPE 123

The Skyware Global Type 123 1.2 m Class II 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 helps to sustain the necessary parabolic shape. The reflector optics feature a long focal length for excellent cross-pol performance.

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

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- Long focal length optics for low cross-pol performance.
- Fine azimuth and elevation adjustments.
- Available with Ku-band co-pol or cross-pol feeds.
- Galvanized 19 mm (.75") O.D. side feed support legs and 51 mm (2") O.D. lower feed support.
- Plated hardware for maximum corrosion resistance.
- Class II system designed for typical 2 W and 4 W Ku-band Block Up-Converters (BUCs).\*

\*3.6 kg or 8 lb max. weight for RF electronics (BUC and INB)

## SPECIFICATIONS

### Type 123 1.2 m RxTx Class II Antenna System

#### Type Approval Information

Antenna Model	62 - 1236201
Intelsat Standard	Standard G (IESS 601)
Approval Code	IA077A00
Eutelsat Standard	VSAT
Approval Code	EA-V051

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

#### RF Performance

Effective Aperture	1.2 m (48 in)
Operating Frequency	Tx ..... 13.75 - 14.50 GHz Rx ..... 10.70 - 12.75 GHz
Polarization	Linear, Orthogonal
Gain ( $\pm 2$ dBi)	Tx ..... 43.3 dBi @ 14.3 GHz Rx ..... 41.8 dBi @ 12.0 GHz
3 dB Beamwidth	Tx ..... 1.2° @ 14.3 GHz Rx ..... 1.5° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	1.5° < $\theta$ < 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 in 1 dB Contour
Antenna Noise Temperature	10° El ..... 45° K 20° El ..... 31° K 30° El ..... 24° 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	Elevation over Azimuth
Elevation Adjustment Range	7° - 84° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous $\pm 20^\circ$ 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

