SKYware GLOBAL

PRODUCT SPECIFICATIONS

Detail Photos
(on right from top to bottom)
Pre-assembled Az/El Mount
RF tested Ku-band feed assembly

1.2 m RxTx Class II Antenna System

TYPE 123

Type approved for use on Intelsat and Eutelsat satellite systems

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/El 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 LNB)*

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 (±.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 θ
	$20° < \theta < 26.3°$	-3.5
	$26.3° < \theta < 48°$	32 - 25 Log θ
	$48° < \theta < 180°$	-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 ±20° 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^2
Shock and Vibration		As Encountered During Shipping and Handling

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VST-010.2
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