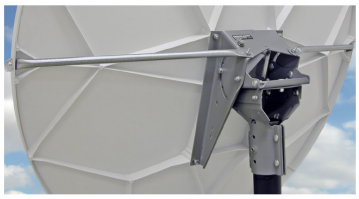
SKYware GLOBAL™

PRODUCT SPECIFICATIONS



Detail Photos
(on right from top to bottom)
Pre-assembled Az/El Mount

Cross-Pol Compensating (XPC)
Ku-band feed assembly

The antenna features a unique feed which provides cross-pol discrimination exceeding industry standards

RoHS

1.2 m RxTx Class I Antenna System

TYPE 123 with XPC Feed

The Skyware Global Type 123 Class I 1.2 m Offset 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 Az/El mount is constructed from heavy-gauge steel to provide a rigid support to the reflector. The Az/El mount secures the antenna to any 73-76 mm (2.88"-3.00") mast and prevents slippage in high winds. A specially formulated powder paint process offers excellent protection from weather-related corrosion.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece precision offset thermoset-molded reflector.
- Long focal length optics for low cross-pol performance.
- Available with Ku-band co-pol or cross-pol feeds.
- Galvanized 19 mm (.75 in) O.D. feed support legs for lightweight outdoor units (ODU's).
- Plated hardware for maximum corrosion resistance.
- Class I system designed for typical 1 W and 2 W Ku-band Block Up-Converters.*

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

SPECIFICATIONS

Type 123 1.2 m RxTx Class I Antenna System

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° < θ < 20°	29 - 25 Log θ
	20° < θ < 26.3°	-3.5
	26.3° < θ < 48°	32 - 25 Log θ
	48° < θ < 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	90 dB
	Rx	> 40 dB
Feed Interface	Tx	WR75 Flat Flange
	Rx	WR75 Flat Flange

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

(All specifications typical)

Skyware Global
1315 Industrial Park Drive
Smithfield, NC 27577
USA

Telephone: +1-919-989-2280
Sales: sales@skywareglobal.com
Internet: www.skywareglobal.com

VST-009.3