

### PRODUCT SPECIFICATIONS

Detail Photos

(on right from top to bottom)

Pre-assembled Az/El Mount with Fine Azimuth and Elevation Adjustments

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







The reflector is thermosetmolded for strength and surface accuracy.





# 1.2 m RxTx Class I Antenna System

**TYPE 122** 

The Skyware Global Type 122 1.2 m Class I 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 not only strengthens the antenna, but also helps to sustain the critical parabolic shape necessary for transmit performance.

The precision 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.

The antenna features a unique feed which provides cross-pol performance that exceeds industry standards

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece precision offset thermosetmolded reflector.
- 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.
- Az/El mount includes both elevation and azimuth fine adjustments
- Class I system designed for typical lightweight Ku-band RF Electronics.\*

\* 2.0 kg or 4.5 lb max. weight (For BUC and LNB) 2.2 kg or 4.8 lb max. weight (For Transceiver)



# **Type 122** 1.2 m RxTx Class I Antenna System

## **Type Approval Information**

Antenna Model		62 - 1225401/02		
Eutelsat Standard		M		
Approval Code		EA-A038		
(See Our Website for a Complete List of Type Approvals)				

#### **RF Performance**

Effective Aperture		1.2 m (48 in)	
Operating Frequency	Tx *		
Polarization		Linear, Orthogonal (Co-Pol Optional)	
	Tx	43.3 dBi @ 14.3 GHz 41.8 dBi @ 12.0 GHz	
3 dB Beamwidth	.Tx	1.2° @ 14.3 GHz 1.5° @ 12.0 GHz	
Sidelobe Envelope (Tx, Co	-Pol dRi)		
Mainbeam $< \theta < 20^{\circ}$			
	20° < θ < 26.3°	-3.5	
	26.3° < θ < 48°	32 - 25 Log Θ	
	48° < θ < 180°	-10 (Typical)	
Antenna Cross-Polarization	30 dB in 1 dB Contour		
Antenna Noise			
Temperature	10° El	48° K	
	20° El	35° K	
	30° El	29° K	
VSWR*	Тх	1.3:1	
	Rx	1.5:1	
Isolation* (Port to Port)	Тх	90 dB	
	Rx	>40 dB	
Feed Interface	Тх	WR75 Flat Flange	
	Rx	WR75 Flat Flange	

(All specifications typical) (\*Eutelsat Approval and Cross-Polarization Specification apply to Tx band 14.0-14.5 GHz only.)

## Satcom Resources

Post Office Box 1639 101 Eagle Road - Building #7 Avon, Colorado 81620 USA 970 748-3094 or tollfree 866 SATCOM1 Fax 970 748-3096 www.satcomresources.com

#### **Mechanical Performance**

Reflector Material		Glass Fiber Reinforced Polyester
Antenna Optics		One-Piece Offset Feed Prime Focus
Mount Type		Elevation over Azimuth
Elevation Adjustment Range		8° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range		360° Continuous; ±5° Fine Adjustment
Mast Pipe Interface		73 - 76 mm (2.88 in - 3.00 in) Diameter
Wind Loading	Operational Survival	72 km/h (45 mph) (<1 dB BPE) 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/ft²
Shock and Vibration		As Encountered During Shipping and Handling

