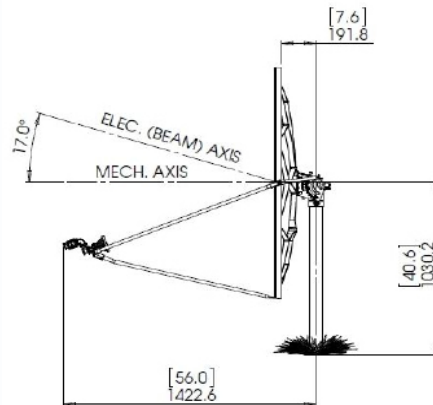


# Type 125: 1.2m Rx/Tx Class I Antenna



- ISO 9001:2008 Certificate of Registration
- One-piece precision SMC Reflector
- Precision Az/EI Mount
- Fine Azimuth and Elevation Adjustment Features
- All Materials Comply with EU Directive No. 2002/95/EC (RoHS)



- 720 Hour Salt Spray Hardware
- Standard Waveguide Flange

The Skyware Global 1.2m Rx/Tx Class I Antenna is a rugged, commercial quality product suitable for the most demanding applications.

- The reflector is constructed from glass fiber reinforced polyester [SMC] for strength and accuracy. A proprietary process developed by Skyware Global ensures high RF reflectivity as needed for Ku-Band operation.
- The precision Az/EI mount is made of galvanized steel for excellent corrosion resistance. This mount includes special features to increase pointing accuracy with low backlash and lockdown error.
- This Az/EI allows the antenna to be installed on standard 73-76mm [2 7/8" - 3"] OD installation mounts.
- All hardware is plated to 720 hour salt spray standards under ASTM B-117.
- Cross-Polarization Isolation of 30dB on axis.
- Excellent Tx Port-to-Port Isolation of 90dB or better.
- Meets or exceeds regulator agency requirements.
- 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)



## • PRODUCT SPECIFICATIONS

### RF Performance

Operating Frequency  
TX\* .....13.75-14.50GHz  
RX .....10.70-12.75GHz

Polarization  
.....Linear Orthogonal  
.....(Co-Pol Optional)

Gain ( $\pm 0.3$  dB)  
TX .....43.3 dBi @ 14.3GHz  
RX .....41.8 dBi @ 12.0GHz

3 dB Beamwidth  
TX .....1.2° @ 14.3GHz  
RX .....1.5° @ 12.0GHz

Sidelobe Envelope (Tx, Co-Pol dBi)  
1.5° <  $\theta$  < 20° .....29-25 log  $\theta$  dBi  
20° <  $\theta$  < 26.3° .....-3.5 dBi  
26.3° <  $\theta$  < 48° .....32-25 log  $\theta$  dBi  
48° <  $\theta$  < 180° .....-10 dBi (Typical)

Antenna Cross-Polarization\*  
.....>30 dB within 1 dB Contour

Antenna Noise Temperature  
10° EL .....45K  
20° EL .....31K  
30° EL .....24K

VSWR  
TX .....1.3:1 Max  
RX .....1.5:1 Max

Isolation\*\*(Port to Port)  
TX .....90 dB  
RX .....40 dB

Feed Interface  
TX .....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.)  
(\*\* With Skyware Global OMT/Filter)

## 1.2m Rx/Tx Class I Antenna

### Mechanical Performance

Reflector Material. . . . . Glass Fiber Reinforced Composite

Antenna Optics . . . . . One-Piece Offset Feed Prime Focus

Mount Type . . . . . Elevation Over Azimuth

Elevation Adjustment Range . . . . . 5°-90° Continuous  
Fine Adjustment

Azimuth Adjustment Range . . . . . 360° Continuous  
 $\pm 5^\circ$  Fine Adjustment

Mast Size . . . . . .27 $\frac{7}{8}$ " - 3"  
(73-76mm) Diameter

### Environmental Performance

Wind Loading  
Operational. . . . . 72km/h (45 mph)

Functional Survival . . . . . 128m/h (80 mph)

Ultimate Survival. . . . . 200km/h (125 mph)

Survival Temperature. . . . . -50°C to +80°C

Operational Temperature . . . . . -40°C to +55°C

Humidity. . . . . 0 to 100% (Condensing)

Atmosphere. . . . . Standard Hardware 720 Hrs  
SST Requirements (ASTM B-117)

Solar Radiation . . . . . 360 BTU/h/ft<sup>2</sup>

Shock and Vibration. . . . . As Encountered during  
Shipping and handling



Satcom solutions for the long haul



REV 03/15-02  
Page 2 of 2

Request A Quote