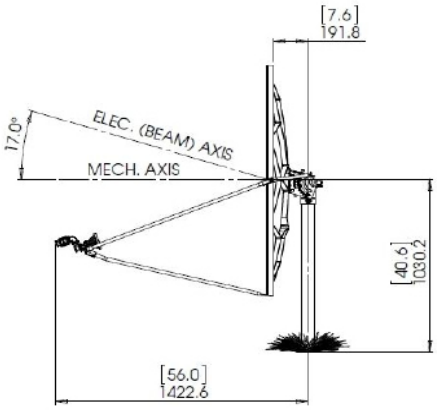
Type 125: 1.2m Rx/Tx Class I Antenna



- ISO 9001:2008 Certificate of Registration
- One-piece precision SMC Reflector
- Precision Az/El 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/El 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/El allows the antenna to be installed on standard 73-76mm [2⅞"- 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)

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1315 Outlet Center Drive, Smithfield, NC 27577 T + 1 919 934 9711 F + 1 919 989 2274 Sales @ Skyware Global.com

RF Performance

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

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

Gain (±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° < θ < 20° . . . . . .29-25 log θ dBi
20° < θ < 26.3°. . . . . -3.5 dBi
26.3° < θ < 48° . . . . . .32-25 log θ dBi
48° < θ < 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)

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 ± 5° Fine Adjustment

Mast Size . . . . . .2⅞" - 3" (73-76mm) Diameter

Enviromental 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/ft²

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

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