

Type 122: 1.2m Rx/Tx Class I Antenna System



- ISO 9001:2008 Certificate of Registration
- All materials comply with EU Directive No. 2011/95/EC (RoHS).
- One-piece precision offset thermoset-molded 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/EI mount includes both elevation and azimuth fine adjustments.
- Class I system designed for typical lightweight Ku-band RF Electronics.*
- Marineised version option is finished in a 2-part Epoxy paint on all 316 stainless steel hardware and galvanized steel fabricated components.



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



The **Skyware Global 1.2m Rx/Tx Class I 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/EI mount is constructed from heavy-gauge steel to provide a rigid support to the reflector.
- The Az/EI 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.



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• PRODUCT SPECIFICATIONS

Type Approval Information

Antenna Model 62-1225401/02

(See Our Website for a Complete List of Type Approvals)

RF Performance

Effective Aperture1.2m (48 in)

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)

Mainbeam $\theta < 20^\circ$ 29-25 log θ dBi
 $20^\circ < \theta < 26.3^\circ$ -3.5 dBi
 $26.3^\circ < \theta < 48^\circ$ 32-25 log θ dBi
 $48^\circ < \theta < 180^\circ$ -10

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

TX 1.3:1
 RX 1.5:1

Isolation (Port to Port)

TX 90db
 RX 40db

Feed Interface

TX WR75 Flat Flange
 RX WR75 Flat Flange

(All specifications typical)

1.2 m Rx/Tx Class I Antenna

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 73-76mm (2.88in-3.00in)
 Diameter

Environmental Performance

Wind Loading

Operational 45mph (72km/h)

Functional Survival 80mph (128km/h)

Ultimate Survival 125mph (200km/h)

Operational Temperature -40°C to +60°C

Survival Temperature -50°C to +80°C

Humidity 0 to 100% (Condensing)

Atmosphere Standard Hardware 500 Hrs
 SST Requirements (ASTM B-117)
 Marinised Option has AISI
 316 Stainless Steel Hardware

Solar Radiation 360 BTU/h/ft²

Shock and Vibration As Encountered during
 Shipping and handling



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 Page 2 of 2