

PRODUCT SPECIFICATIONS

Detail Photos
(on right from top to bottom)
Pre-assembled Az/EI Mount
RF tested Ku-band feed
assembly



1.2 m Rx/Tx Class II Antenna System

TYPE 123

Type approved for use
on Intelsat and Eutelsat
satellite systems



The Skyware Global Type 123 1.2 m Class II 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 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 heavy gauge steel Az/EI mount secures the antenna to any 73-76 mm (2.88"-3.00") mast and prevents slippage in high winds. A special powder paint process offers excellent protection from weather-related corrosion.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- Long focal length optics for low cross-pol performance.
- Fine azimuth and elevation adjustments.
- Available with Ku-band co-pol or cross-pol feeds.
- Galvanized 19 mm (.75") O.D. side feed support legs and 51 mm (2") O.D. lower feed support.
- Plated hardware for maximum corrosion resistance.
- Class II system designed for typical 2 W and 4 W Ku-band Block Up-Converters (BUCs).*

*3.6 kg or 8 lb max. weight for RF electronics (BUC and LNB)



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Type Approval Information

Antenna Model 62 - 1236201
Intelsat Standard Standard G (IESS 601)
Approval Code IA077A00
Eutelsat Standard VSAT
Approval Code EA-V051

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

RF Performance

Effective Aperture 1.2m (48in)

Operating Frequency

TX 13.75 - 14.50 GHz
RX 10.70 - 12.75 GHz

Polarization Linear, Orthogonal

Gain (± 0.2 dB)

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 dBi
20° < θ < 26.3° -3.5 dBi
26.3° < θ < 48° 32-25 log θ dBi
48° < θ < 180° -10 dBi

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 80db
Rx 35db

Feed Interface

Tx WR75 Flat Flange
Rx WR75 Flat Flange

(All specifications typical)

1.2m Rx/Tx Class II Antenna System

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,
 $\pm 20^\circ$ Fine Adjustment

Mast Pipe Interface 73 - 76 mm (2.88 in - 3.00 in)
Diameter

Environmental Performance

Wind Loading

Operational 50 mph (80 km/h)

Survival 125 mph (200 km/h)

Temperature -50°C to +80°C

Humidity 0 to 100% (Condensing)

Atmosphere Standard Hardware 500 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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