

## 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. 2011/65/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)



Satcom solutions for the long haul

REV 04/17-03  
Page 1 of 2

**• PRODUCT SPECIFICATIONS**

**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 Aperature . . . . .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,  
 ± 20° 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/ ft<sup>2</sup>

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



REV 04/17-03  
 Page 2 of 2