

# 96 cm Rx/Tx Class II Antenna System



## PRODUCT SPECIFICATIONS

### Detail Photos

(on right from top to bottom)

Pre-assembled Precision  
Az/EI Mount with Fine-  
elevation adjustment and  
stamped degree scale  
RF tested KU-band Feed  
Assembly



## 96 cm Rx/Tx Class II Antenna System TYPE 960

Type approved for use  
on Intelsat and Eutelsat  
satellite systems



The Skyware Global Type 960 96 cm Class II Rx/Tx 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 sustains its critical parabolic shape necessary for transmit performance. 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).
- One-piece precision offset thermoset-molded reflector.
- Long focal length optics for low cross-pol performance.
- Galvanized 19 mm (.75") O.D. side feed support legs and 51 mm (2") O.D. lower feed support.
- Corrosion resistant plated hardware.
- Available with Ku-Band co-pol or cross-pol feeds.
- Class II system designed for typical 2 W and 4 W Ku-Band Block Up-Converters (BUCs)\*

\*5.4 kg or 12 lb max. weight for RF electronics (BUC and LNB)

## • PRODUCT SPECIFICATIONS

### Type Approval Information

Antenna Model.....	62-9605601
Intelsat Standard .....	Standard G (IESS 601)
Approval Code.....	IA078A00
Eutelsat Standard .....	VSAT
Approval Code.....	EA-V050

(See Our Website for Complete List of Type Approvals)

### RF Performance

Effective Aperture .....96 cm equivalent (38 in)

#### Operating Frequency

TX .....13.75 -14.50 GHz  
RX .....10.70 -12.75 GHz

Polarization .....Linear, Orthogonal

#### Gain ( $\pm 0.2$ dB)

TX .....41.2 dBi @ 14.3 GHz  
RX .....39.7 dBi @ 12.0 GHz

#### 3 dB Beamwidth

TX .....1.5° @ 14.3 GHz  
RX .....1.8° @ 12.0 GHz

#### Sidelobe Envelope (Tx, Co-Pol dBi)

1.8° <  $\theta$  < 20° .....29-25 log  $\theta$   
20° <  $\theta$  < 26.3° .....-3.5  
26.3° <  $\theta$  < 48° .....32-25 log  $\theta$   
48° <  $\theta$  < 180° .....-10

Antenna Cross-Polarization...>30db in 1dB Contour

#### Antenna Noise Temperature

10° EL.....53° K  
20° EL.....39° K  
30° EL.....32° 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)

## 96cm 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 (2.38 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



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G L O B A L

REV 12/14-01  
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