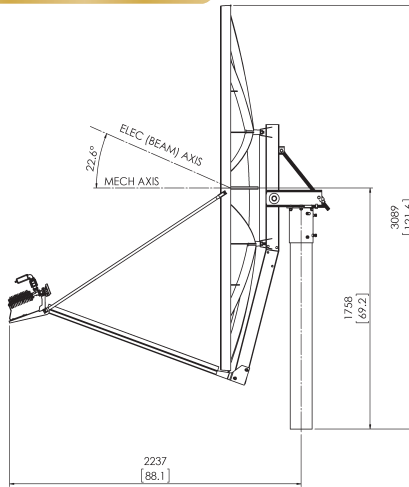


# Type 245: 2.4m Rx/Tx Standard Ku-Band SFL Class III Antenna with Mode Matched Feed



- ISO 9001:2008 Certified
- Eutelsat Certificate No. EA-V066
- Two-piece offset SMC Reflector
- Precision Az/EI 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 Interface

The **Skyware Global 2.4m Rx/Tx Standard Ku-Band SFL Class III Antenna with Mode Matched Feed** is a rugged, commercial quality product suitable for the most demanding applications. The Antenna features a unique feed which provides cross-pol performance that exceeds industry standards.

- The reflector is constructed from glass fiber reinforced polyester for strength and accuracy. A proprietary process developed by Skyware Global insures high RF reflectivity as needed for Ku Band operation.
- The precision Az/EI 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/EI allows the antenna to be installed on standard 168mm [6.63"] OD installation mounts.
- All hardware is plated to 720 hour salt spray standards under ASTM B-117.
- Tx Cross-Polarization Isolation of greater than 31dB within 1dB contour.
- Excellent Tx Port-to-Port Isolation of 90dB or better
- Meets or exceeds regulator agency requirements
- Heavy-duty Class III mount for 11 kg (25 lb) RF Electronics (LNB & BUC) and ≤16W installed power. (BUC support kit may be required depending on application)



• PRODUCT SPECIFICATIONS

**RF Performance**

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

Polarization  
 ..... Linear Orthogonal

Gain (±0.3 dB)  
 TX ..... 49.2 dBi @ 14.25GHz  
 RX ..... 47.5 dBi @ 11.70GHz

3 dB Beamwidth  
 TX .....0.6° @ 14.3GHz  
 RX .....0.8° @ 11.2GHz

Sidelobe Envelope (Tx, Co-Pol dBi)  
 Eutelsat Standard M  
 Mainbeam < q < 20° ..... 29-25 log q dBi  
 20° < q < 26.3° ..... -3.5 dBi  
 26.3° < q < 48° ..... .32-25 log q dBi  
 48° < q < 180° ..... -10 dBi (Typical)

Antenna Cross-Polarization within 1dB contour  
 TX ..... 31dB  
 RX ..... 35dB

Antenna Noise Temperature  
 10° EL ..... .55K°  
 20° EL ..... 46K°  
 30° EL ..... 45K°

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)  
 (\* With Skyware Global OMT/Filter)

**2.4m Rx/Tx Standard Ku-Band SFL Class III  
 Antenna with Mode Matched Feed**

**Mechanical Performance**

Reflector Material. ....Glass Fiber Reinforced Composite

Antenna Optics .....2-Piece Offset Feed Prime Focus

Mount Type .....Elevation Over Azimuth

Elevation Adjustment Range .....10° - 90° Continuous  
 Fine Adjustment

Azimuth Adjustment Range .....360° Continuous  
 ± 12° Fine Adjustment

Feed Support ..... Regular Section with  
 Alignment Legs

Mast Size ..... .6.63" (168mm) Diameter

Antenna Weight. ....Approx 110.65Kg  
 (Not Including Mast)

**Enviromental Performance**

Windloading  
 Operational Wind Speed. ....72km/h (45 mph)

Functional Survival .....200km/h (125 mph)

Operational Temperature ..... -50°C to +80°C

Humidity. ....0 to 100% (Condensing)

Atmosphere. ....Standard Hardware 720 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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Satcom solutions for the long haul