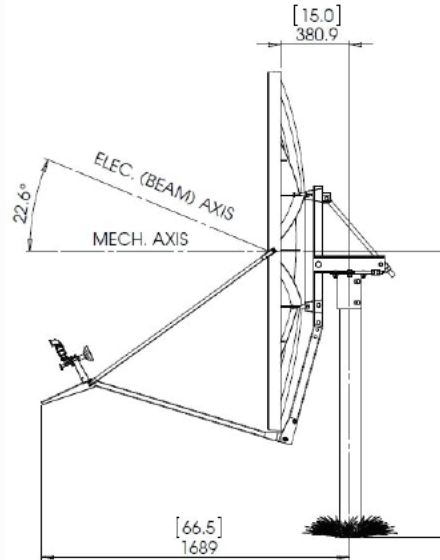
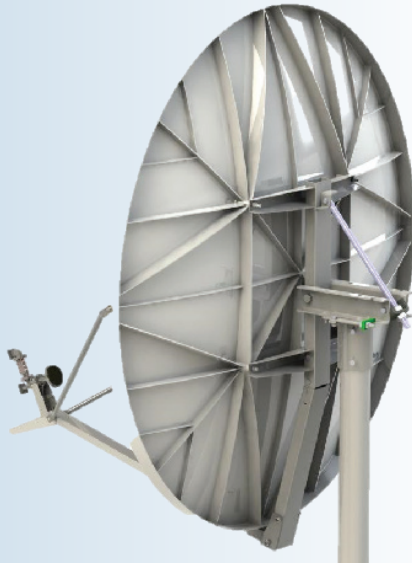


Type 183: 1.8m Rx/Tx Extended Ku-Band SFL Class III Antenna



- ISO 9001:2008 Certificate of Registration
- One-piece precision 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 1.8m Rx/Tx Extended Ku-Band SFL Class III Antenna** is a rugged, commercial quality product suitable for the most demanding applications.

- The reflector is constructed from glass fiber reinforced polyester [SMC] for strength and accuracy. A proprietary process developed by Skyware Global ensures 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 (114mm) [4.50"] OD installation mounts.
- All hardware is plated to 720 hour salt spray standards tested in accordance with ASTM B-117.
- Cross-Polarization Isolation of 30dB on axis.
- 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).



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• PRODUCT SPECIFICATIONS

RF Performance

Operating Frequency
 TX12.75-14.5GHz
 RX10.70-11.7GHz

Polarization Linear Orthogonal

Gain (±0.3 dB)
 TX46.8 dBi @ 14.3GHz
 RX44.7 dBi @ 11.2GHz

3 dB Beamwidth
 TX0.8° @ 14.3GHz
 RX1.1° @ 11.2GHz

Sidelobe Envelope (Tx, Co-Pol dBi)
 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
30 dB (on Axis)
26 dB in .5 dB Contour

Antenna Noise Temperature
 10° EL43K°
 20° EL28K°
 30° EL23K°

VSWR
 TX1.3:1 Max
 RX1.5:1 Max

Isolation*(Port to Port)
 TX90 dB
 RX40 dB

Feed Interface
 TXWR75 Flat Flange
 RXWR75 Flat Flange

(All specifications typical)
 (* With Skyware Global OMT/Filter)

1.8m Rx/Tx Extended Ku-Band SFL Class III Antenna

Mechanical Performance

Reflector Material. . . . Glass Fiber Reinforced Composite

Antenna Optics One-Piece Offset Feed Prime Focus

Mount Type. Elevation Over Azimuth

Elevation Adjustment Range10°- 90° Continuous
 Fine Adjustment

Feed Support Regular Section with Alignment Legs

Mast Size.4.50" (114mm) Diameter

Antenna Weight Approx 50.52Kg
 (Not Including Mast)

Environmental Performance

Windloading
 Operational. 80km/h (50 mph)

Functional Survival128km/h (80 mph)

Ultimate Survival.200km/h (125 mph)

Survival Temperature.-50°C to +80°C

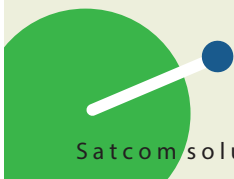
Operational Temperature-40°C to +55°C

Humidity0 to 100% (Condensing)

Atmosphere. Standard Hardware 720 Hrs
 SST Requirements (ASTM B-117)

Solar Radiation360 BTU/h/ft²

Shock and Vibration As Encountered during
 Shipping and handling



Satcom solutions for the long haul



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