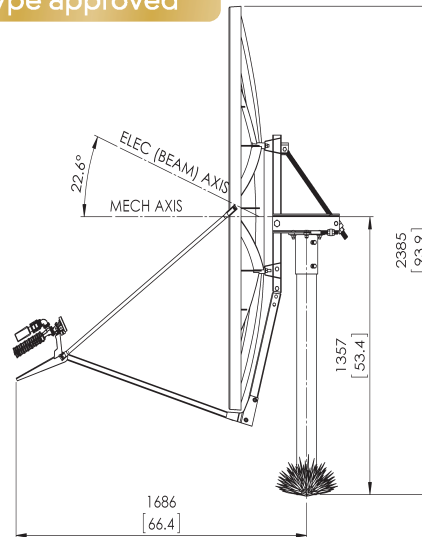


Type 185: 1.8m Rx/Tx Standard Ku-Band SFL Class III Antenna with Mode Matched Feed



type approved



- ISO 9001:2008 Certificate of Registration
- Eutelsat Certificate No. EA-V065
- One-piece precision 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 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 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.
- TX Cross-Polarization Isolation of 29dB 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) with $\leq 16W$ installed power. (BUC support kit may be required depending on application.)



• PRODUCT SPECIFICATIONS

RF Performance

Operating Frequency
TX13.75-14.50GHz
RX10.70-12.75GHz

Polarization Linear Orthogonal

Gain (± 0.3 dB)
TX46.7 dBi @ 14.25GHz
RX45.0 dBi @ 11.70GHz

3 dB Beamwidth
TX0.8° @ 14.30GHz
RX1.1° @ 11.20GHz

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

Antenna Cross-Polarization within 1dB contour
TX29dB
RX21dB

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
TX WR75 Flat Flange
RX WR75 Flat Flange
(All specifications typical)

(* With Skyware Global OMT/Filter)

1.8m Rx/Tx Standard Ku-Band SFL Class III Antenna with Mode Matched Feed

Mechanical Performance

Reflector Material.Glass Fiber Reinforced Composite

Antenna OpticsOne-Piece Offset Feed Prime Focus

Mount Type.Elevation Over Azimuth

Elevation Adjustment Range10°- 90° Continuous
Fine Adjustment

Feed SupportRegular Section with Alignment Legs

Mast Size.4.50" (114mm) Diameter

Antenna WeightApprox 50.52Kg
(Not Including Mast)

Enviromental Performance

Windloading
Operational.72km/h (45 mph)

Functional Survival128km/h (80 mph)

Ultimate Survival.200km/h (125 mph)

Survival Temperature.-50°C to +80°C

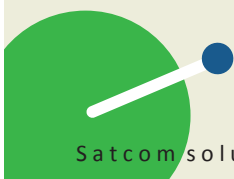
Operational Temperature-40°C to +55°C

Humidity0 to 100% (Condensing)

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

Solar Radiation360 BTU/h/ft²

Shock and VibrationAs Encountered during
Shipping and handling



Satcom solutions for the long haul