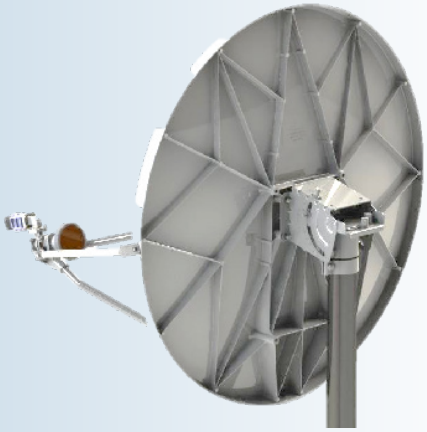
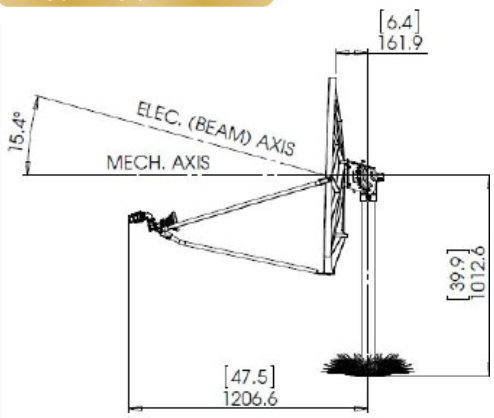
Type 965: 96cm Standard Rx/Tx Ku-Band LFL Class I Antenna





- ISO 9001:2008 Certificate of Registration
- Eutelsat Cert. No. EA-V061
- One-piece precision SMC Reflector
- Precision Az/El Mount
- Fine Azimuth and Elevation Adjustment Features
- All Materials Comply with EU Directive No. 2011/65/EC (RoHS]
- 720 Hour Salt Spray Hardware
- Standard Waveguide Flange Interface

The **Skyware Global 96cm Standard Rx/Tx Ku-Band LFL Class I 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 insures high RF reflectivity as needed for Ku Band operation.

- The precision Az/El 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/El allows the antenna to be installed on standard 73-76mm [2⅞"- 3"] OD installation mounts.

- All hardware is plated to 720 hour salt spray standards tested in accordance with ASTM B-117.

- TX Cross-Polarisation of greater than 30db within 1dB contour.

- Excellent Port-to-Port Isolation of 90dB or better.

- Meets or exceeds regulator agency requirements.

- Class I system designed for typical 1 W and 2 W Ku-band RF Electronics.*

* 1.7 kg or 3.7 lb max. weight (For BUC and LNB) 1.9 kg or 4.2 lb max. weight (For Transceiver)

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1315 Outlet Center Drive, Smithfield, NC 27577 T + 1 919 934 9711 F + 1 919 989 2274 Sales @ Skyware Global.com

96cm Standard Rx/Tx Ku-Band LFL Class I Antenna

RF Performance

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

Polarization
. . . . . .Linear Orthogonal
. . . . . (Col-Pol) Optional

Gain (±0.3 dB)
TX . . . . . .43.3 dBi @ 14.3GHz
RX . . . . . .41.1 dBi @ 11.2GHz

3 dB Beamwidth
TX . . . . . 1.2° @ 14.3GHz
RX . . . . . 1.6° @ 11.2GHz

Sidelobe Envelope (Tx, Co-Pol dBi)
Mainbeam< 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 (Typical)

Antenna Cross-Polarization within 1dB contour
TX. 30dB
RX. 28dB

Antenna Noise Temperature
10° EL 48K
20° EL 35K
30° EL 29K

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)

Mechanical Performance

Reflector Material. . . .Glass Fiber Reinforced Composite

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

Mount Type . . . . . .Elevation Over Azimuth

Elevation Adjustment Range . . . . . .5°-90° Continuous
Fine Adjustment

Azimuth Adjustment Range. . . . . .360° Continuous
± 5° Fine Adjustment

Mast Size . . . . . .2⅞”-3”
(73-76mm) Diameter

Antenna Weight. . . . . Approx 13.51Kg
(Not Including Mast)

Enviromental Performance

WindLoading
Operational. . . . . 72km/h (45 mph)

Functional Survival . . . . . 128km/h (80 mph)

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

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

Operational Temperature . . . . . -40°C to +55°C

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

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

Solar Radiation. . . . . .360 BTU/h/ft²

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

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