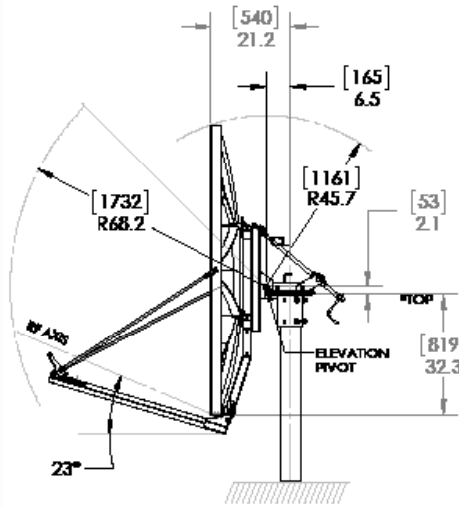
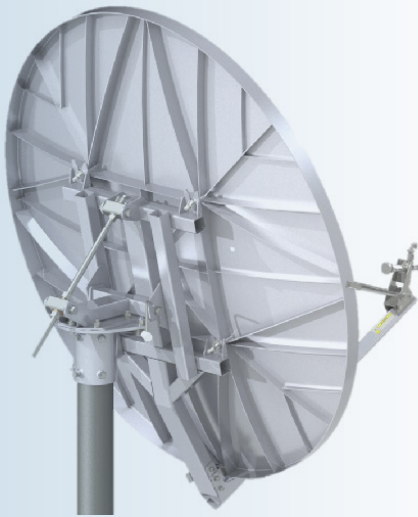


Type 182: 1.8m Standard Rx/Tx Ka-Band SFL Antenna



- 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
- Designed for Skyware Global Ka-Band Transceivers

The Skyware Global 1.8m Standard Rx/Tx Ka-Band SFL 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 Ka-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 4" diameter pipe (4.5"/114mm) or 5" diameter pipe (5.56"/141mm) OD.
- All hardware is plated to 720 hour salt spray standards tested in accordance with ASTM B-117.
- Designed for use with the Skyware Global line of Ka-band Feed assemblies.
- Tx Cross-Polarization Isolation of 25dB (within 1dB b/w) or better.
- Excellent Tx Port to Port Isolation of 90dB or better.
- Meets or exceeds regulator agency requirements.
- System designed for typical Ka-band RF Electronics.



• PRODUCT SPECIFICATIONS

RF Performance

Operating Frequency
TX 29.50-30.00GHz
RX 19.20-21.20GHz

Polarization
TX Circular, RH or LH
RX Circular, LH or RH

Gain¹ (min)
TX 52.5 dBi @ 30.0GHz
RX 49.1 dBi @ 20.2GHz

3 dB Beamwidth
TX 0.4° @ 30GHz
RX 0.6° @ 20GHz

Sidelobe Envelope (Tx, Co-Pol dBi)
100 λ/D < 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 b/w)
TX 25dB
RX 22dB

Antenna Noise Temperature¹
..... @ 30° EL 57K Mk

VSWR 1.2:1 Max

Isolation
TX 90dB
RX 75dB

Feed Interface
TX WR28 Flat Flange
RX WR42 Flat Flange

¹ Gain and Noise Temperature at Feed Horn Flange
(All specifications typical)

1.8m Standard Rx/Tx Ka-Band SFL Antenna

Mechanical Performance

Reflector Material. . . Glass Fiber Reinforced Polyester (SMC)

Antenna Optics One-Piece Offset Feed Prime Focus

Mount Type Elevation Over Azimuth

Elevation Adjustment Range 10°-90° Continuous
Fine Adjustment

Azimuth Adjustment Range 360° Continuous
± 3° Fine Adjustment

Mast Size Interface. 4" (114mm) Diameter Min
5" (141mm) Diameter Max

Antenna Weight. Approx 113.6Kg
(Not Including Mast)

Environmental Performance

Windloading
Operational. 80km/h (50mph)

Functional Survival 128km/h (80mph)

Ultimate Survival 200km/h (125mph)

Survival Temperature -50°C to +80°C

Operational Temperature -40°C to +55°C

Humidity. 0 to 100% (Condensing)

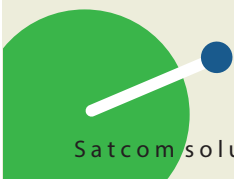
Corrosion Protection. Hot Dip Galvanized
Structural Components, Hardware meets
720 hour Salt Spray Test (ASTM B-117)

Solar Radiation 360 BTU/h/ft²

Shock and Vibration. As Encountered during
Shipping and handling



REV 03/15-03
Page 2 of 2



Satcom solutions for the long haul

1315 Outlet Center Drive, Smithfield, NC 27577

All designs, specification and availabilities of products and services presented in this bulletin are subject to change without notice. ©2015 Skyware Global