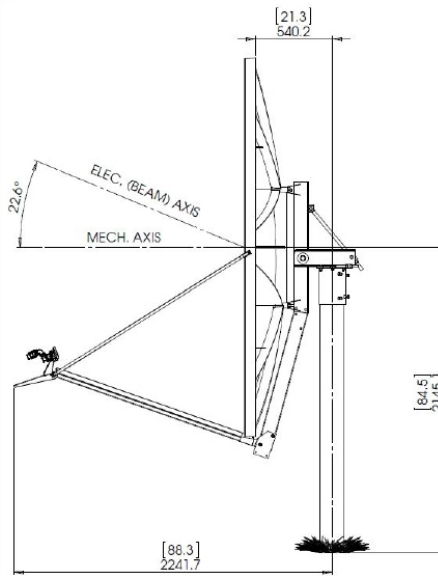


Type 243: 2.4m BSS Band Antenna

SFL RxTx Class I



- 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 2.4m BSS Band Antenna SFL RxTx

Class I 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/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.
- 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).



• PRODUCT SPECIFICATIONS

RF Performance

Operating Frequency

TX17.3 -18.1 GHz
 RX 10.95 -12.75 GHz

Polarization

Tx.....Linear V-Pol or H-Pol
 Rx.....Linear H-Pol or V-Pol

Gain (±0.3 dB)

TX 50.4 dBi @ 17.7 GHz
 RX 47.4 dBi @ 12.0 GHz

3 dB Beamwidth

TX 0.5° @ 17.7 GHz
 RX 0.7° @ 12.0 GHz

Sidelobe Envelope (Tx, Co-Pol dBi)

100 λ/D < q < 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 1 dB)

TX >30dB
 RX >23dB

Antenna Noise Temperature

.....31K° @ 30° Elevation @ 12.0 GHz

VSWR

Tx1.3:1 Max
 Rx 1.5:1 Max

Isolation

Tx 90 dB
 Rx 45 dB

Feed Interface

Tx WR62 Flat Flange
 Rx WR75 Flat Flange

2.4m BSS Band Antenna

SFL RxTx Class 1

Mechanical Performance

Reflector Material.Glass Fiber Reinforced Polyester (SMC) with Aluminium Screen

Antenna Optics Two-Piece Offset Feed Prime Focus

Mount Type Elevation Over Azimuth

Elevation Adjustment Range 10° - 90° Continuous
 Fine Adjustment

Coarse Azimuth Adjustment Range 360° Continuous;

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

Mast Size6.63" (168mm) Diameter

Antenna Weight. Approx 110.63Kg (Not Including Mast)

Environmental Performance

Operational Wind Speed..... 80km/h (50 mph)

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

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

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

Marinized Version..... Also Possible

Operational Temperature -40°C to +55°C

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

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

Solar Radiation 360 BTU/h/ ft²

Rain Operational..... 0.5" Per Hour



REV 08/14-01
 Page 2 of 2



Satcom solutions for the long haul