Type243: 2.4m Extended Ku-Band Antenna SFL Rx/Tx Class III

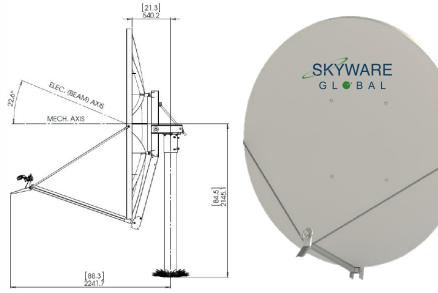




- One-piece precision SMC Reflector
- · Precision Az/El Mount
- Fine Azimuth and Elevation Adjustment Features
- All Materials Comply with EU Directive No. 2002/95/EC (RoHS)



- 720 Hour Salt Spray Hardware
- Standard Waveguide Flange Interface



The Skyware Global 2.4m Extended Ku-Band Antenna SFL Rx/Tx Class III 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/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).



REV 08/14-01 Page 1 of 2

PRODUCT SPECIFICATIONS

SFL Rx/Tx Class III

RF Performance

Operating Frequency

Operating Frequency	
TX	12.75 -14.5 GHz
RX	10.70 -11.7 GHz

Polarization

			Linear	Orthogonal
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Gain (±0.3 dB)

TX	 	 	. 48.9 dBi @	14.3	GHz
RX	 	 	. 46.8 dBi @	11.2	GHz

3 dB Beamwidth

TX	 .0.6° @ 14.3 GHz
RX	 0.8° @ 11.2 GHz

Sidelobe Envelope (Tx, Co-Pol dBi)

Mainbeam $< \theta < 20^{\circ} \dots$	29-25 log θ dBi
20° < θ< 26.3°	3.5 dBi
26.3° <θ< 48°	32-25 $\log \theta$ dBi
48° < θ < 180°	10 dBi (Typical)

Antenna Cross-Polarization

 	30 dB (on Axis)
	26 dB in .5 dB Contour

Antenna Noise Temperature

10°	EL	 	 	 									 55K	
20°	EL	 	 	 	 								 46K	0
30°	EL	 	 	 	 								 45K	0

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)

Satcom solutions for the long haul

Mechanical Performance

2.4m Extended Ku-Band Antenna

Reflector MaterialGlass Fiber Reinforced Compo							
Antonna Ontics	2 Diago Officat Food Drima Facus						

Antenna	Optics	2-Piece Offset	. reed Prime rocus
	-		

Elevation Adjustment Range	JS
Fine Adjustment	

Azimuth Adjustment Range 360° Continuous; ± 12° Fine Adjustment

Feed SupportRegular Section with Alignment Legs

Antenna Weight..... Approx 110.65Kg (Not Including Mast)

Environmental Performance

Operational Wind Speed	80km/h	(50 mph)
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Functional Survival 200km/h (125 mph)

Operational Temperature-50°C to +80°C

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

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

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





REV 08/14-01 Page 2 of 2