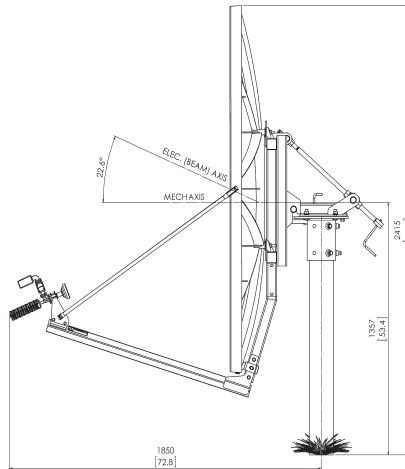


Type 188: 1.8m Rx/Tx Ku-Band High Wind Antenna



- ISO 9001:2008 CERTIFICATE OF REGISTRATION
- One-piece precision SMC Reflector
- Heavy Duty 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

The **Skyware Global 1.8m Rx/Tx Ku-Band High Wind Antenna** is a rugged, commercial quality product suitable for the most demanding applications. This product is capable of operation at 65mph and above depending on supporting structure.

- The reflector is constructed from glass fiber reinforced polyester (SMC) for strength and accuracy. A proprietary process developed by Skyware Global ensures high RF reflectivity.
- The Heavy Duty Az/EI mount is made of hot dipped 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 5" (127mm) or 5.56" (141mm) OD mounts.
- All hardware is plated to 720 hour salt spray standards tested in accordance with ASTM B-117.
- Excellent Tx Port to Port Isolation of 90dB or better.
- Meets or exceeds regulatory agency requirements.



• PRODUCT SPECIFICATIONS

RF Performance

Antenna Size	1.8M (71in.)
Operating Frequency	
Tx	13.75-14.50GHz
Rx	10.70-12.75GHz
Polarization	Linear Orthogonal
Gain (± 0.3 dB)	
Tx	46.7 dBi @ 14.25GHz
Rx	45.0 dBi @ 11.70GHz
3 dB Beamwidth	
Tx	0.8° @ 14.30GHz
Rx	1.1° @ 11.20GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	
Mainbeam $< \theta < 20^\circ$	29-25 log θ dB
$20^\circ < \theta < 26.3^\circ$	-3.5 dB
$26.3^\circ < \theta < 48^\circ$	32-25 log θ dB
$48^\circ < \theta < 180^\circ$	-10 dB (Typical)
Antenna Cross-Polarization	30dB on axis
Antenna Noise Temperature	
10° EL	43K°
20° EL	28K°
30° EL	23K°
VSWR	
Tx	1.3:1 Max
Rx	1.5:1 Max
Isolation*(Port to Port)	
Tx	80 dB
Rx	35 dB
Feed Interface	
Tx	WR75 Flat Flange
Rx	WR75 Flat Flange

1.8m Rx/Tx Ku-Band High Wind Antenna

Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester (SMC)
Antenna Optics	Prime Focus, Offset Feed
Mount Type	Elevation Over Azimuth
Elevation Adjustment Range	10°- 90° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous $\pm 3^\circ$ Fine Adjustment
Mast Size	5" or 5.56" (127 mm or 141mm) Diameter
Antenna Weight	Approx 113.6Kg (Not Including Mast)

Environmental Performance

Windloading	
Operational Wind Speed	105km/h (65mph)
Functional Survival	160km/h (100mph)
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/ft ²
Shock and Vibration	As Encountered during Shipping and handling



REV 08/16-03
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