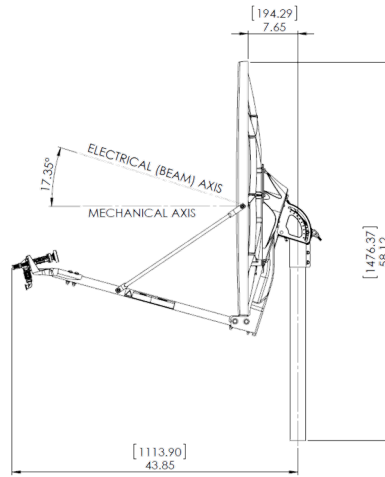


# Type 988: 98cm Rx/Tx Standard Ka-Band Antenna



- 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 Feed Components
- Designed for Tier I OEM Transceiver

New **Skyware Global 98cm Rx/Tx Standard Ka-Band 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 ensures 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 (60.3mm) [2.375"] OD installation mounts.
- 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 for CP Application.
- Excellent Tx Port to Port Isolation of 90dB or better
- Meets or exceeds regulatory agency requirements
- System designed for typical Ka-band RF Electronics



## • PRODUCT SPECIFICATIONS

### RF Performance

Operating Frequency  
RX .....19.2-20.2GHz  
TX .....29.5-30.0GHz

Gain (+/0.3db)  
RX .....44.1 dBi @ 20.2GHz  
TX .....47.6 dBi @ 30.0GHz

VSWR ..... 1.3:1 Max

3dB Beamwidth  
RX .....1.01° @ 20.2GHz  
TX .....0.69° @ 30.0GHz

Sidelobe Envelope 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  
0 > 48° .....-10 dBi (averaged)

Antenna Noise Temperature  
10° Elevation .....80K  
20° Elevation .....60K  
30° Elevation .....44K

Cross Polarization Isolation  
within 1.0 dB Beamwidth  
RX .....22 dBi  
TX .....25 dBi

Isolation (Port to Port)  
RX .....80db  
TX .....90db

Output Waveguide Interface Flange  
RX .....WR42  
TX .....WR28

## 98cm Rx/Tx Standard Ka-Band Antenna

### Mechanical Performance

Reflector Material. . . . . Glass Fiber Reinforced Polyester (SMC), Ka-Band Formulation

Antenna Optics . . . . . 1-Piece Offset Feed Prime Focus

Mast Pipe Size . . . . . 2.0" SCH 40 Pipe (2.375" OD) (60.3mm Diameter)

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

Azimuth Adjustment Range . . . . . 360°Continuous Course Adjustment ± 10° Fine Adjustment

Shipping Specifications. . . . .  
Approx. Net Weight: 55lbs(25Kg)  
Approx. Packaged Weight: 65lbs(30Kg)

### Environmental Performance

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

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

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

Temperature (operational) . . . . .-40° to 140°F (-40° to 60)°C

Rain (operational). . . . . ½"/hr

Atmospheric Conditions. . . . .  
Salt, Pollutants and Contaminants  
as Encountered in Coastal and Industrial Areas

Relative Humidity . . . . . 0 to 100% with Condensation

Solar Radiation . . . . .360 BTU/h/ft<sup>2</sup>



Satcom solutions for the long haul



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