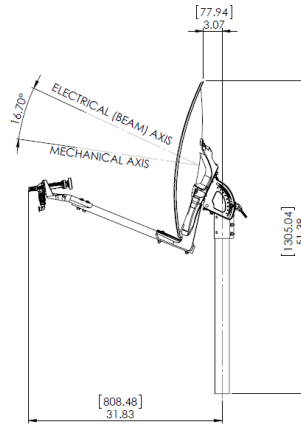
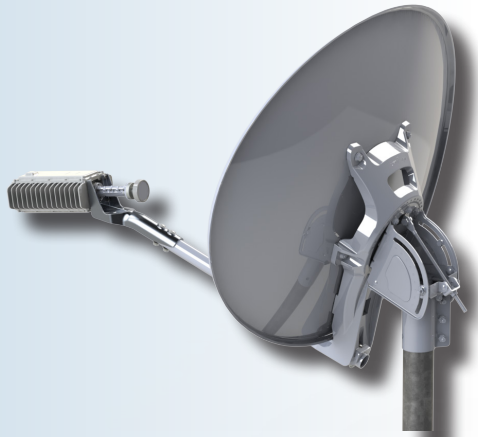


# Type 748: 74cm Rx/Tx Extended Ka-Band Antenna



- ISO 9001:2008 Certificate of Registration
- One-piece Steel 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 74cm Rx/Tx Extended Ka-Band Antenna** is a rugged, commercial quality product suitable for the most demanding applications.

- The stamped steel reflector is designed for strength and accuracy 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 (60mm) [2.38"] 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 ..... 18.3-20.2GHz  
TX ..... 28.3-30.0GHz

Gain (+/0.3db)  
RX ..... 42.2 dBi @ 20.2GHz  
TX ..... 45.2 dBi @ 30.0GHz

VSWR ..... 1.3:1 Max

3dB Beamwidth  
RX ..... 1.38° @ 20.2GHz  
TX ..... 0.96° @ 30.0GHz

Sidelobe Envelope Co-Pol (dB)  
100  $\lambda/D < \theta < 20^\circ$  ..... 29-25 log  $\theta$  dB  
20° <  $\theta < 26.3^\circ$  ..... -3.5 dB  
26.3° <  $\theta < 48^\circ$  ..... 32-25 log  $\theta$  dB  
0 > 48° ..... -10 dBi (averaged)

Antenna Noise Temperature  
10° Elevation ..... .96K  
20° Elevation ..... .69K  
30° Elevation ..... .54K

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

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

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

## 74cm Rx/Tx Extended Ka-Band Antenna

### Mechanical Performance

Reflector Material ..... Steel

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

Mast Pipe Size ..... 2.5" SCH 40 Pipe  
(2.38" OD) (60mm) Diameter

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

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

Shipping Specifications .....  
Approx. Net Weight: 45lbs (20Kg)  
Approx. Packaged Weight: 55lbs (25Kg)

### Environmental Performance

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

Survival ..... 125 mph (201 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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GLOBAL

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