

Type 244: 2.4 m Ku-band Dual Optics Antenna System



- ISO9001:2008 Certification
- Eutelsat Certificate No. EA-V062
- Two-piece precision offset thermoset-molded reflector.
- Heavy-duty galvanized Az/El mount.
- Fine Azimuth and elevation adjustments.
- Plated hardware for maximum corrosion resistance.
- Includes Ku-band feed assembly and precision aluminum sub-reflector.
- All materials comply with EU directive No. 2002/95/EC (RoHS).



The **Skyware Global Type 244 2.4 m Dual Optics Rx/Tx Antenna** is a rugged commercial grade product suitable for the most demanding applications. The dual optics design provides the superior cross-pol discrimination demanded for optimum performance networks.

The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector is a network of support ribs which strengthens and helps to maintain the parabolic shape necessary for transmit performance.

The heavy-gauge steel Az/El provides a rigid support to the reflector and feed support arm. Heavy-duty lock-down bolts secure the mount to any 168 mm (6.63") O.D. mast and prevents slippage in high wind.

- Dual Optics design for ultra low cross-polarization.
- Hot-dip galvanizing is standard on this model for maximum environmental protection.
- Tx Cross-Polarization Isolation of 35dB within 1dB contour,



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• PRODUCT SPECIFICATIONS

RF Performance

Operating Frequency
TX 13.75 - 14.50GHz
RX 10.75 - 12.75GHz

Polarization Linear, Orthogonal

Gain (± 0.3 dB)
TX 49.2 dBi @ 14.25GHz
RX 47.5 dBi @ 11.70GHz

3 dB Beamwidth
TX 0.6° @ 14.3GHz
RX 0.7° @ 12.0GHz

Sidelobe Envelope (Tx, Co-Pol dBi)
2.5° < θ < 7° 29-25 log θ dBi
7° < θ < 9.2° -3.5 dBi
9.2° < θ < 48° 32-25 log θ dBi
48° < θ < 180° -10 dBi

Antenna Cross-Polarization within 1 dB contour
TX 35 dB
RX 35 dB

Antenna Noise Temperature
10° EL 45K°
20° EL 31K°
30° EL 30K°

VSWR
Tx 1.3:1
Rx 1.4:1

Isolation (Port to Port)
Tx 80 dB
Rx 40 dB

Feed Interface
Tx WR75 Flat Flange
Rx WR75 Flat Flange

(All specifications typical)

2.4 m Ku-Band Dual Optics RxTx Antenna System

Mechanical Performance

Reflector Material Two-Piece Glass
Fiber Reinforced Polyester

Antenna Optics Offset Gregorian
(Dual Optics)

Mount Type Elevation Over Azimuth

Elevation Adjustment Range 10° - 90° Continuous
Fine Adjustment

Azimuth Adjustment Range 360° Continuous;
 $\pm 12^\circ$ Fine Adjustment

Feed Support Rectangular Section
with Alignment Legs

Mast Pipe Interface 6.63 in (168 mm) Diameter

Environmental Performance

Wind Loading

Operational 50 mph (80 km/h)

Survival 125 mph (200 km/h)

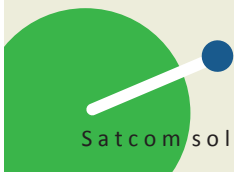
Temperature -50°C to +80°C

Humidity 0 to 100% (Condensing)

Atmosphere Standard Hardware Meets
500 Hrs SST Requirements (ASTM B-117)

Solar Radiation 360 BTU/h/ ft²

Shock and Vibration As Encountered during
Shipping and handling



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