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

eutelsat type approved

SKYWARE GLOBAL

- 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).

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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1315 Outlet Center Drive, Smithfield, NC 27577 T + 1 919 934 9711 F + 1 919 989 2274 Sales @ Skyware Global.com

2.4 m Ku-Band Dual Optics RxTx Antenna System

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)

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; ± 12° Fine Adjustment

Feed Support. . . . . .Rectangular Section with Alignment Legs

Mast Pipe Interface. . . . . .6.63 in (168 mm) Diameter

Enviromental 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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