

**PRODUCT
SPECIFICATIONS**

Detail Photos

(on right from top to bottom)

Heavy-duty galvanized Az/EI
Mount

Fine azimuth adjustments

RF tested Ku-band feed
assembly



2.4 m Ku-band Dual Optics Antenna System

TYPE 244

The Skyware Global Type 244 2.4 m Dual Optics RxTx 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 on the Eutelsat satellite system.

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/EI 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.

Hot-dip galvanizing is standard on this model for maximum environmental protection.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- ETSI certified.
- Dual Optics design for ultra low cross-polarization.
- Two-piece precision offset thermoset-molded reflector.
- Heavy-duty galvanized Az/EI mount.
- Fine Azimuth and elevation adjustments.
- Plated hardware for maximum corrosion resistance.
- Includes Ku-band feed assembly and precision aluminum sub-reflector.

Type approved for use on
Eutelsat satellite system



SPECIFICATIONS

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

Type Approval Information

| | |
|-------------------|--------------|
| Antenna Model | 62 - 2445202 |
| Eutelsat Standard | L, M |
| Approval Code | EA-027 |

(See Our Website for a Complete List of Type Approvals)

RF Performance

| | |
|------------------------------------|---|
| Effective Aperture | 2.4 m (96 in) |
| Operating Frequency | Tx 13.75 - 14.50 GHz Rx 10.70 - 12.75 GHz |
| Polarization | Linear, Orthogonal |
| Gain (± 2 dBi) | Tx 49.3 dBi @ 14.3 GHz Rx 47.8 dBi @ 12.0 GHz |
| 3 dB Beamwidth | Tx 0.6° @ 14.3 GHz Rx 0.7° @ 12.0 GHz |
| Sidelobe Envelope (Tx, Co-Pol dBi) | 2.5° < θ < 7° 29 - 25 Log θ 7° < θ < 9.2° -3.5 9.2° < θ < 48° 32 - 25 Log θ 48° < θ < 180° -10 |
| Antenna Cross-Polarization | Minimum 35 dB in 1 dB Contour |
| Antenna Noise Temperature | 10° El 45° K 20° El 31° K 30° El 30° K |
| 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 $\pm 12'$ Fine Adjustment |
| Feed Support | Rectangular Section with Alignment Legs |
| Mast Pipe Interface | 168 mm (6.63 in) Diameter |
| Wind Loading | Operational 80 km/h (50 mph) Survival 200 km/h (125 mph) |
| Temperature | -50°C to 80°C |
| Humidity | 0 to 100% (Condensing) |
| Atmosphere | Standard Hardware Meets 500 Hour Salt Spray Test Requirements (ASTM B-117) |
| Solar Radiation | 360 BTU/h/ft ² |
| Shock and Vibration | As Encountered During Shipping and Handling |

