

TYPE 243: 2.4m C-Band Linear RT/TX Class III Antenna System



PRODUCT SPECIFICATIONS

Detail Photos
(on right from top to bottom)
Heavy-duty galvanized Az/EI
Mount
Fine azimuth and elevation
adjustments
RF tested C-band Linear
Polarized feed assembly



The two-piece reflector
is thermoset-molded for
strength and surface
accuracy.



The Skyware Global Type 243 2.4 m Class III Rx/Tx Antenna is a rugged commercial grade product suitable for the most demanding applications. The two-piece reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of each reflector half is a network of support ribs which not only strengthens the antenna, but also helps to sustain the critical parabolic shape necessary for transmit performance.

The Az/EI mount is constructed from heavy-gauge steel to provide a rigid support to the reflector and feed support arm. Heavy-duty lockdown bolts secure the mount to any 168 mm (6.63") O.D. mast and prevent slippage in high winds. Hot-dip galvanizing is standard on this model for maximum environmental protection.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- Two-piece precision offset thermoset-molded reflector.
- Heavy-duty galvanized Az/EI mount.
- Fine Azimuth and elevation adjustments.
- Galvanized support arm and alignment struts.
- Factory pre-assembled mount.
- RF tested feed assembly.
- Heavy-duty Class III mount for 11 kg (25 lb) RF electronics (LNB & BUC)



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1315 Outlet Center Drive, Smithfield, NC 27577

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•PRODUCT SPECIFICATIONS

RF Performance

Effective Aperture 2.4m (96 in)

Operating Frequency

TX 5.850 - 6.725 GHz

RX 3.400 - 4.200 GHz

Polarization Linear, Orthogonal

Gain (± 0.3 dB)

TX 42.0 dBi @ 6.1GHz

RX 38.0 dBi @ 3.9GHz

3 dB Beamwidth

TX 1.3° @ 6.1 GHz

RX 2.1° @ 3.9 GHz

Sidelobe Envelope (Tx, Co-Pol dBi)

$2.5^\circ < \theta < 20^\circ$ 29-25 log θ

$20^\circ < \theta < 26.3^\circ$ -3.5

$26.3^\circ < \theta < 48^\circ$ 32-25 log θ

$48^\circ < \theta < 180^\circ$ -3.5

Antenna Cross-Polarization..... 30 db (On Axis)

Antenna Noise Temperature

10° EL..... 40K°

20° EL..... 35K°

30° EL..... 32K°

VSWR

Tx 1.3:1

Rx 1.5:1

Isolation(Port to Port)

Tx 60 dB

Rx 60 dB

Feed Interface

Tx Type N or CPR-137

Rx CPR-229

(All specifications typical)

2.4 m C-band Linear Rx/Tx Class III Antenna System

Mechanical Performance

Reflector Material.....Glass Fiber Reinforced Polyester

Antenna OpticsTwo-Piece Offset Feed Prime Focus

Mount Type Elevation Over Azimuth

Elevation Adjustment Range 10° - 90° Continuous
Fine Adjustment

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

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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