

# TYPE 243: 2.4m C-Band Circular Polarized RX/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 Circular  
Polarized feed assembly



Type approved for use  
on Intelsat satellite system



The Skyware Global Type 243 2.4 m Class III RxTx Antenna is a rugged commercial grade product suitable for the most demanding applications. The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector 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.
- Plated hardware for maximum corrosion resistance.
- Includes C-band Circular Polarized RxTx Feed Assembly.
- Heavy-duty Class III mount for 11 kg (25 lb) RF electronics (LNB & BUC).

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## • PRODUCT SPECIFICATIONS

### Type Approval Information

Antenna Model	62 - 24303411L Type N 62 - 2433911L (WR137)
Intelsat Standard	Standard G & H-2 (IESS 601)
Approval Code	IA051A00

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

### RF Performance

Effective Aperture	2.4 m (96 in)	
Operating Frequency	Tx	5.850 - 6.425 GHz
	Rx	3.625 - 4.200 GHz
Polarization	Circular; Tx LH, Rx RH; or Tx RH, Rx LH	
Gain ( $\pm 4$ dBi)	Tx	42.2 dBi @ 6.1 GHz
	Rx	38.0 dBi @ 3.9 GHz
3 dB Beamwidth	Tx	1.3° @ 6.1 GHz
	Rx	2.1° @ 3.9 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	2° < $\theta$ < 48° ..... -32 - 25 Log $\theta$	
	48° < $\theta$ < 180° ..... -10	
Axial Ratio	Tx	1.3 VAR (2.3 dB)
	Rx	1.4 VAR (3.0 dB)
Antenna Noise Temperature	10° El	40° K
	20° El	35° K
	30° El	32° K
VSWR	Tx	1.3:1
	Rx	1.5:1
Isolation (Port to Port)	Tx	80 dB
	Rx	70 dB
Feed Interface	Tx	Type N or CPR-137
	Rx	CPR-229

(All specifications typical)

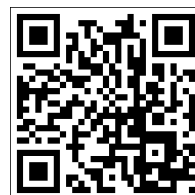
## 2.4 m C-band Circular Polarized Rx/Tx Class III

### Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester
Antenna Optics	One-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
Feed Support	Rectangular Section with Alignment Legs
Mast Pipe Interface	114 mm (4.50 in) Diameter

### Environmental Performance

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 <sup>2</sup>	
Shock and Vibration	As Encountered During Shipping and Handling	



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