



PRODUCT SPECIFICATIONS

Detail Photos

(on right from top to bottom)

Heavy-duty galvanized
Az/El Mount

Fine azimuth and elevation
adjustments

RF tested C-Band Linear
Polarized feed assembly



2.4 m C-Band Linear RxTx Class III Antenna System

Type 243

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

The Andrew Corporation Type 243 2.4 m Class III RxTx 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/El 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 6.63" (168 mm) O.D.

mast to prevent slippage in high winds. Hot-dip galvanizing is standard for maximum environmental protection.

- Two-piece precision offset thermoset-molded reflector.
- Fine Azimuth and elevation adjustments.
- Galvanized feed support arm and alignment struts.
- Factory pre-assembled mount.
- Galvanized and stainless hardware for maximum corrosion resistance.
- RF tested feed assembly.
- Heavy-duty Class III mount for 25 lb (11 kg) RF electronics (LNB & BUC).

SPECIFICATIONS

TYPE 243 2.4 m C-Band Linear RxTx Class III Antenna System

RF Performance

		C-Band Linear
Effective Aperture		2.4 m (96 in)
Operating Frequency	Tx	5.850 - 6.725 GHz
	Rx	3.400 - 4.200 GHz
Polarization		Linear, Orthogonal
Gain (± 3 dBi)	Tx	42.0 dBi @ 6.138 GHz
	Rx	38.0 dBi @ 3.913 GHz
3 dB Beamwidth	Tx	1.3° @ 6.1 GHz
	Rx	2.1° @ 3.9 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	$2^\circ < \theta < 20^\circ$	29-25 Log θ
	$20^\circ < \theta < 26.3^\circ$	-3.5
	$26.3^\circ < \theta < 48^\circ$	32-25 Log θ
	$48^\circ < \theta < 180^\circ$	-10
Antenna Cross-Polarization		>30 dB (on axis)
Antenna Noise Temperature	10° El	40°K
	20° El	35°K
	30° El	32°K
VSWR	Tx	1.3:1
	Rx	1.4:1
Isolation	Tx	60 dB
	Rx	60 dB
Feed Interface	Tx	CPR-137 or Type N
	Rx	CPR-229

(All specifications typical)

Mechanical Performance

Reflector Material		Glass Fiber Reinforced Polyester
Antenna Optics		Two-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		6.63 in (168 mm) Diameter
Wind Loading	Operational	50 mi/h (80 km/h)
	Survival	125 mi/h (200 km/h)
Temperature		-50°C to 80°C
Humidity		0 to 100% (Condensing)
Atmosphere		Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation		360 BTU/h/ft ²
Shock and Vibration		As Encountered During Shipping and Handling



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