



**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



# 2.4 m C-Band Circular Polarized RxTx Class III Antenna System

## Type 243

Type approved for use on Intelsat Satellite System.



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 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 6.63" (168 mm) O.D.

mast and 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.
- Factory pre-assembled mount.
- Galvanized feed support arm and alignment struts.
- Galvanized and stainless hardware for maximum corrosion resistance.
- Includes C-Band Circular Polarized RxTx Feed Assembly.
- Heavy-duty Class III mount for 25 lb (11 kg) RF electronics (LNB & BUC).

## SPECIFICATIONS

### Type 243 2.4 m C-Band Circular Polarized RxTx Class III Antenna System

#### Type Approval Information\*

Antenna Model ..... 62-24334-01 (Type N), 62-24339-01 (WR 137)

Intelsat Standard ..... Standards G & H-3 (IESS 601)

Approval Code ..... IA051A00

#### 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 @ 6.138 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)		
	$2^\circ < \theta < 48^\circ$	32-25 Log $\theta$
	$48^\circ < \theta < 180^\circ$	-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	Tx	60 dB
	Rx	60 dB
Feed Interface	Tx	Type N or CPR-137
	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; $\pm 120^\circ$ 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 <sup>2</sup>	
Shock and Vibration	As Encountered During Shipping and Handling	

\*See our web site for a complete list of type approvals.



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