



## PRODUCT SPECIFICATIONS

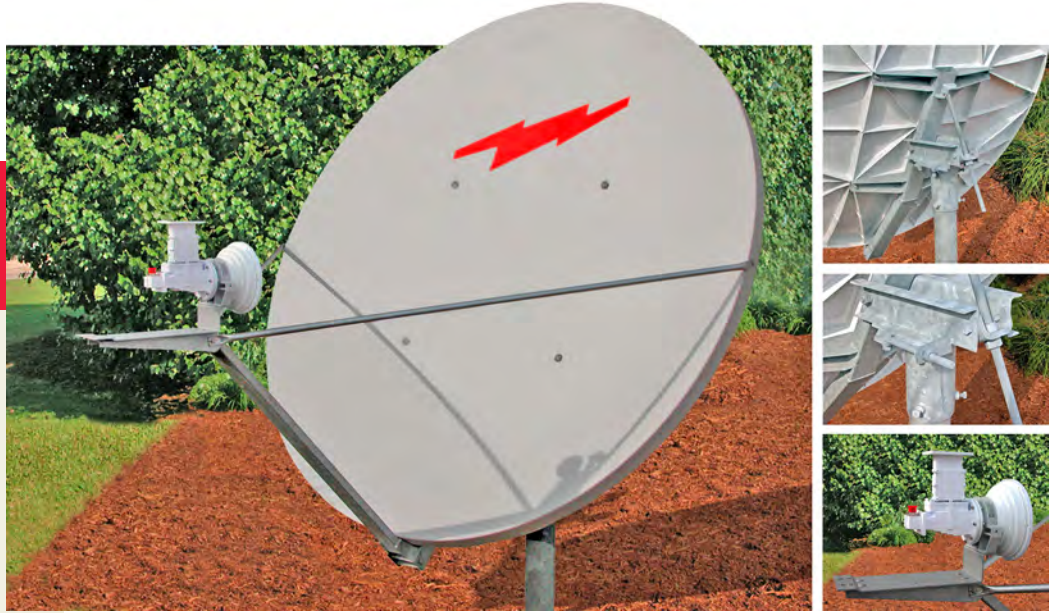
### Detail Photos

(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 reflector is thermoset-molded for strength and surface accuracy.

# 1.8 m C-Band Linear RxTx Class III Antenna System

## TYPE 183

The Andrew Corporation Type 183 1.8 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 each 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 4.50" (114 mm) O.D.

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

- One-piece precision offset thermoset-molded reflector.
- Fine Azimuth and elevation adjustments.
- Galvanized feed support arm and alignment struts.
- 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).

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### TYPE 183 1.8 m C-Band Linear RxTx Class III Antenna System

#### RF Performance

Effective Aperture		<b>C-Band Linear</b> 1.8 m (71 in)
Operating Frequency	Tx	5.850 - 6.725 GHz
	Rx	3.400 - 4.200 GHz
Polarization		Linear, Orthogonal
Gain ( $\pm 3$ dBi)	Tx	39.3 dBi @ 6.138 GHz
	Rx	35.4 dBi @ 3.913 GHz
3 dB Beamwidth	Tx	2.0° @ 6.1 GHz
	Rx	3.0° @ 3.9 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)		
		2° < $\theta$ < 20° ..... 29-25 Log $\theta$
		20° < $\theta$ < 26.3° ..... -3.5
		26.3° < $\theta$ < 48° ..... 32-25 Log $\theta$
		48° < $\theta$ < 180° ..... -10
Antenna Cross-Polarization		>30 dB (on axis)
Antenna Noise Temperature	10° El	41°K
	20° El	36°K
	30° El	33°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		One-Piece Offset Feed Prime Focus Long Focal Length
Mount Type		Elevation over Azimuth
Elevation Adjustment Range		7°-90° Continuous Fine Adjustment
Azimuth Adjustment Range		360° Continuous
Feed Support		Rectangular Section with Alignment Legs
Mast Pipe Interface		4.50 in (114 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



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