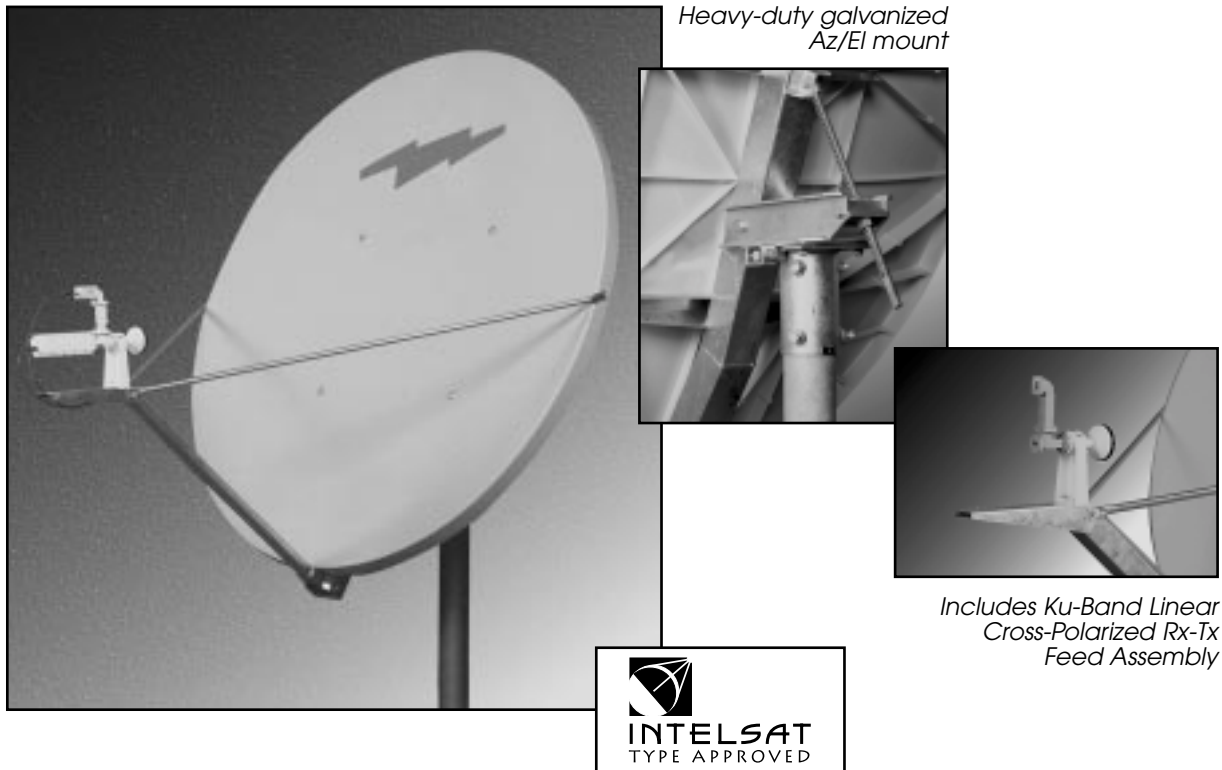




1.8m Ku-Band Rx-Tx Antenna System



*Heavy-duty galvanized
Az/EI mount*

*Includes Ku-Band Linear
Cross-Polarized Rx-Tx
Feed Assembly*



FEATURES

- One-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.

DESCRIPTION

The Andrew Corporation 1.8m Offset Rx-Tx 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 4.50 in. O.D. mast and prevent slippage in high winds. Hot-dip galvanizing is standard for maximum environmental protection.

These models have been tested and Type Approved for use on the Intelsat Satellite System.

1.8m Ku-Band Rx-Tx Antenna System

ANTENNA MODEL
INTELSAT STANDARD
APPROVAL CODE

62-18356-01C
 Standard G (IESS 601)
 IA027B00



RF PERFORMANCE

Effective Aperture		1.8m (71 in.)
Operating Frequency	Tx	13.75-14.50 GHz
	Rx	10.70-12.75 GHz
Polarization		Linear, Orthogonal
Gain (± 2 dBi)	Tx	46.8 dBi @ 14.25 GHz
	Rx	45.3 dBi @ 11.95 GHz
3 dB Beamwidth	Tx	.79° @ 14.3 GHz
	Rx	.99° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	$1^\circ < \theta < 20^\circ$	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 (Typical)
Antenna Cross-Polarization		>30 dB (on Axis) 26 dB in .5 dB Contour
Antenna Noise Temperature	10° EI	43° K
	20° EI	28° K
	30° EI	23° K
VSWR		1.3:1 Max.
Isolation, Tx to Rx		85 dB Min.
Feed Interface	Tx	WR75 Cover Flange (UBR120)
	Rx	WR75 Cover Flange (UBR120)

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; $\pm 10^\circ$ Fine Adjustment
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 ²
Shock and Vibration		As Encountered During Shipping and Handling



Connecting the Wireless World

Andrew Corporation
 10500 W. 153rd Street
 Orland Park, IL 60462 USA

Customer Support Center
 1315 Industrial Park Drive
 Smithfield, NC 27577 USA
 Telephone +1-919-989-2205
 Fax: +1-919-989-2200

Internet
www.andrew.com

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