ANDREW®

PRODUCT SPECIFICATIONS

Detail Photos

(on right from top to bottom)

Pre-assembled Az/El Mount

Fine-elevation adjustment with stamped degree scale

RF tested Ku-Band feed assembly

1.2 m RxTx Class I Antenna System

TYPE 123

Type approved for use on Intelsat and Eutelsat Satellite Systems

Intelsat

eutelsat

The Andrew Corporation Type 123 1.2 m Class I 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 reflector optics features a long focal length for excellent cross-pol performance, required by many satellite operators.

The Az/El mount is constructed from heavy-gauge steel to provide a rigid support to the reflector. The Az/El mount secures the antenna to any 2.88" - 3.00" O.D. (73-76 mm) mast and prevents slippage in high winds. A specially formulated powder paint process offers excellent protection from weather-related corrosion.

- One-piece precision offset thermoset-molded reflector.
- Long focal length optics for low cross-pol performance.
- Fine azimuth and elevation adjustments.
- Available with Ku-Band Co–Pol. or Cross–Pol. feeds.
- Galvanized .75" (19 mm) O.D. feed support legs for lightweight outdoor units (ODU's).
- Plated hardware for maximum corrosion resistance.
- Class I system designed for typical 1W and 2W Ku-band Block Up-Converters*

**4.5 lb or 2 kg max. weight for RF electronics (BUC and LNB)*

One Company. A World of Solutions.

SPECIFICATIONS

TYPE 123 1.2 m RxTx Class I Antenna System

Type Approval Information*

Antenna Model	62-12356-11
Intelsat Standard	Standard G (IESS 601)
Approval Code	IA077A00

Antenna Model	62-12356-11
Eutelsat Standard	VSAT
Approval Code	EA-V048

RF Performance

Effective Aperture		1.2 m (48 in)
Operating Frequency	Tx	13.75-14.50 GHz
	Rx	10.70-12.75 GHz
Polarization		Linear, Orthogonal
Gain (±.2 dBi)	Tx	43.3 dBi @ 14.25 GHz
	Rx	41.8 dBi @ 11.95 GHz
3 dB Beamwidth	Tx	1.2° @ 14.3 GHz
	Rx	1.5° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)		
1.5° <θ< 20°		29-25 Log θ
20° <θ< 26.3°		-3.5
26.3° <θ< 48°		32 - 25 Log θ
48° <θ< 180°		-10
Antenna Cross-Polarization		>30 dB in 1 dB Contour
Antenna Noise Temperature	10° El	45°K
	20° El	31°K
	30° El	24°K
VSWR	Tx	1.3:1
	Rx	1.5:1
Isolation, Port to Port	Tx	110 dB
	Rx	35 dB
Feed Interface	Tx	WR75 Cover Flange (UBR120)
	Rx	WR75 Cover Flange (UBR120)

(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°-84° Continuous Fine Adjustment
Azimuth Adjustment Range		360° Continuous; ±20° Fine Adjustment
Mast Pipe Interface		2.88 in - 3.00 in.(73-76 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/ft²
Shock and Vibration		As Encountered During Shipping and Handling

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

ANDREW®

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

One Company. A World of Solutions.

Customer Support Center
From North America
Telephone: 1-800-255-1479
Fax: 1-800-349-5444
satcom@andrew.com

International
Telephone: +1-708-873-2307
Fax: +1-708-349-5444

Internet: www.andrew.com

Bulletin PA-100549-EN (6/05)