PRODUCT SPECIFICATIONS

Detail Photos

(on right from top to bottom)

Heavy-duty galvanized Az/El Mount

Fine azimuth adjustments

RF tested Ku-band feed assembly

2.4 m Ku-band Dual Optics Antenna System

TYPE 244

Type approved for use on Eutelsat satellite system

The ASC Signal Type 244 2.4 m Dual Optics RxTx Antenna is a rugged commercial grade product suitable for the most demanding applications. The dual optics design provides the superior cross-pol discrimination demanded for optimum performance on the Eutelsat satellite system.

The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector is a network of support ribs which strengthens and helps to maintain the parabolic shape necessary for transmit performance.

The heavy-gauge steel Az/El provides a rigid support to the reflector and feed support arm. Heavy-duty lock-down bolts secure the mount to any 168 mm (6.63") O.D. mast and prevents slippage in high wind.

Hot-dip galvanizing is standard on this model for maximum environmental protection.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- ETSI certified.
- Dual Optics design for ultra low cross-polarization.
- Two-piece precision offset thermoset-molded reflector.
- Heavy-duty galvanized Az/El mount.
- Fine Azimuth and elevation adjustments.
- Galvanized and stainless hardware for maximum corrosion resistance.
- Includes Ku-band feed assembly and precision aluminum sub-reflector.

SPECIFICATIONS

Type 244 2.4 m Ku-band Dual Optics RxTx Antenna System

Type Approval Information

Antenna Model	62 - 2445202
Eutelsat Standard	L, M
Approval Code	EA-027

(See Our Website for a Complete List of Type Approvals)

RF Performance

Effective Aperture		2.4 m (96 in)
Operating Frequency	Tx	13.75 - 14.50 GHz
	Rx	10.70 - 12.75 GHz
Polarization		Linear, Orthogonal
Gain (±.2 dBi)	Tx	49.3 dBi @ 14.3 GHz
	Rx	47.8 dBi @ 12.0 GHz
3 dB Beamwidth	Tx	0.6° @ 14.3 GHz
	Rx	0.7° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)		
	2.5° <Θ< 7°	29 - 25 Log Θ
	7° <Θ< 9.2°	-3.5
	9.2° <Θ< 48°	32 - 25 Log Θ
	48° <Θ< 180°	-10
Antenna Cross-Polarization		Minimum 35 dB in 1 dB Contour
Antenna Noise Temperature	10° El	45° K
	20° El	31° K
	30° El	30° K
VSWR	Tx	1.3:1
	Rx	1.4:1
Isolation (Port to Port)	Tx	80 dB
	Rx	40 dB
Feed Interface	Tx	WR75 Flat Flange
	Rx	WR75 Flat Flange

(All specifications typical)

Mechanical Performance

Reflector Material		Two-Piece Glass Fiber Reinforced Polyester
Antenna Optics		Offset Gregorian (Dual Optics)
Mount Type		Elevation over Azimuth
Elevation Adjustment Range		10° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range		360° Continuous ±12° Fine Adjustment
Feed Support		Rectangular Section with Alignment Legs
Mast Pipe Interface		168 mm (6.63 in) Diameter
Wind Loading	Operational	80 km/h (50 mph)
	Survival	200 km/h (125 mph)
Temperature		-50°C to 80°C
Humidity		0 to 100% (Condensing)
Atmosphere		Standard Hardware Meets 500 Hour Salt Spray Test Requirements (ASTM B-117)
Solar Radiation		360 BTU/h/ft^2
Shock and Vibration		As Encountered During Shipping and Handling

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