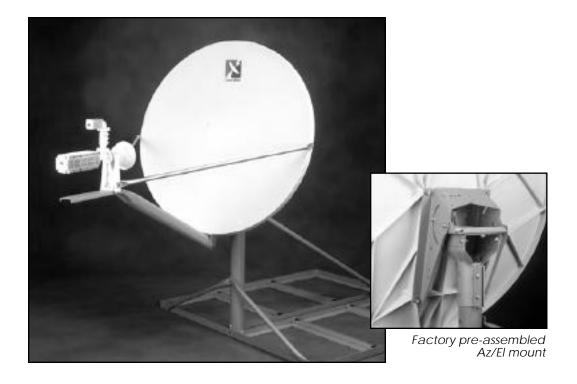


TYPE 960

96cm Receive-Transmit Offset Antenna System



FEATURES -

- One-piece precision offset thermosetmolded reflector.
- Long focal length optics for low cross-pol performance.
- Fine azimuth and elevation adjustments.
- Galvanized .75 in. O.D. feed support legs for lightweight outdoor units (ODU's).
- Optional 2 in. diameter lower feed arm for larger ODU's (up to 8 lbs).
- Cadmium-plated hardware for maximum corrosion resistance.

DESCRIPTION

The Channel Master® Type 960 96cm 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 its critical parabolic shape necessary for transmit performance. The reflector optics feature 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 yoke cap clamp secures the mount to any 2.88 in. to 3.00 in. O.D. mast and prevents slippage in high wind. A specially formulated powder paint process offers excellent protection from weather-related corrosion.

SPECIFICATIONS

TYPE 960

96cm Receive-Transmit Offset Antenna System

RF PERFORMANCE

Effective Aperture Operating Frequency	Tx Rx	96cm 13.75 - 14.50 GHz 10.70 - 12.75 GHz
Polarization		Linear, Orthogonal
Gain (±.2 dBi)	Tx	41.2 dBi @ 14.25 GHz
	Rx	39.7 dBi @ 11.95 GHz
3 dB Beamwidth	Tx	1.5° @ 14.3 GHz
	Rx	1.8° @ 12.0 GHz
Sidelobe Envelope (Tx,Co-Pol dBi)		
	1.8° ⊖ 20°	29-25 Log Θ
	20° Θ 26.3°	-3.5
	26.3° Θ 48°	32-25 Log Θ
	48° ⊖ 180°	-10 (Typical)
Antenna Cross-Polarization		30 dB in 1 dB Contour
Antenna Noise Temperature	10° EL	53° K
	20° El	39° K
	30° El	32° K
VSWR		1.3:1 Max.
Isolation	Tx	70 dB Min.
	Rx	35 dB Min.
Feed Interface		WR-75 (Both Ports)

MECHANICAL PERFORMANCE

Reflector Material Antenna Optics

Mount Type Elevation Adjust. Range Azimuth Adjust.Range Mast Pipe Interface Wind Loading

Temperature

Humidity
Atmosphere

Solar Radiation
Shock and Vibration

Glass Fiber Reinforced Polyester One-Piece Offset Feed Prime Focus-

Long Focal Length Elevation over Azimuth

7°-90° Continuous Fine Adjustment 360° Continuous; ± 20° Fine Adjust. 2.88-3.00 in. (73-76 mm) Diameter

45 mi/h (72 km/h) 125 mi/h (200 km/h)

-50°C to 80°C

Operational

Survival

0 to 100% (Condensing)Salt, Pollutants andContaminants asEncountered in Coastal and Industrial Areas

360 BTU/h/ft²

As Encountered During
Shipping and Handling



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