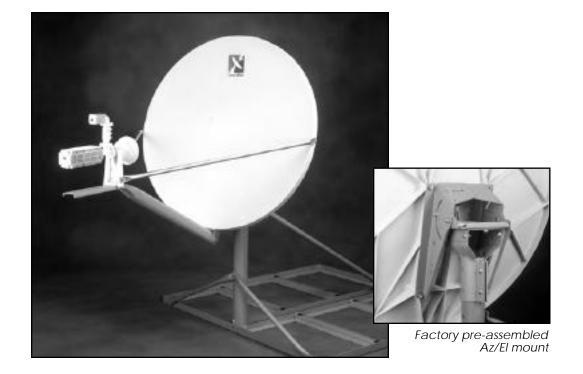


TYPE 960

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.

SPECIFICATIONSTYPE 96096cm Receive-Transmit Offset Antenna System

RF PERFORMANCE

Effective Aperture		96cm
Operating Frequency	Тх	13.75 - 14.50 GHz
	Rx	10.70 - 12.75 GHz
Polarization		Linear, Orthogonal
Gain (±.2 dBi)	Тх	41.2 dBi @ 14.25 GHz
	Rx	39.7 dBi @ 11.95 GHz
3 dB Beamwidth	Тх	1.5° @ 14.3 GHz
	Rx	1.8° @ 12.0 GHz
Sidelobe Envelope (Tx,Co-Pol dBi)		
	$1.8^{\circ} \Theta 20^{\circ}$	29-25 Log Θ
	$20^{\circ} \Theta$ 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		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	
Mount Type Elevation Adjust. Range Azimuth Adjust.Range Mast Pipe Interface			
Wind Loading	Operational Survival	45 mi/h (72 km/h) 125 mi/h (200 km/h)	
Temperature Humidity Atmosphere		-50°C to 80°C 0 to 100% (Condensing) Salt, Pollutants and Contaminants as	Channel Master*
Solar Radiation Shock and Vibration		Encountered in Coastal and Industrial Areas 360 BTU/h/ft ² As Encountered During Shipping and Handling	US Sales Office Smithfield,North Carolina USA Phone: (919) 989-2205 Fax: (919) 989-2200 e-mail: cmvsatsales@cmnc.com Germany Sales Office Pforzheim,Germany Iel +49 (0) 7331-14557-0

Pforzheim,Germany Tel. +49 (0) 7231-14557-0 Fax +49 (0) 7231-14557-10 e-mail: cmi@channel-master-int.com Web: http://www.channelmaster.com