

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



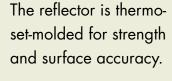


The ASC Signal Type 100TX 1.0 m Class I RxTx Antenna is a rugged commercial grade product suitable for the most demanding applications. The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector is a network of support ribs which not only strengthens the antenna, but also helps to sustain the critical parabolic shape necessary for transmit performance.

The heavy gauge steel Az/El mount secures the antenna to any 73-76 mm (2.88"-3.00") mast and prevents slippage in high winds. A special powder paint process offers excellent protection from weather-related corrosion.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece precision offset thermosetmolded reflector.
- Single bolt fine elevation adjustment.
- Galvanized 19 mm (.75") O.D. feed support legs.
- Factory pre-assembled mount.
- Plated hardware for maximum corrosion resistance.
- Includes RxTx OMT/Filter assembly.
- Class I system designed for typical 1 W and 2 W Ku-band Block Up-Converters (BUCs)*

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





Type 100TX 1.0 m RxTx Class I Antenna System

RF Performance

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Effective Aperture		1.0 m (40 in)	
Operating Frequency	Tx	13.75 - 14.50 GHz 10.70 - 12.75 GHz	
Polarization		Linear, Orthogonal	
Gain (±.2 dBi)	Tx	41.5 dBi @ 14.3 GHz 40.2 dBi @ 12.0 GHz	
3 dB Beamwidth	.Tx	1.5° @ 14.3 GHz 1.9° @ 12.0 GHz	
Sidelobe Envelope (Tx, Co-Pol dBi)			
onucione annotape (in) c	2.5° <⊖< 20°	29 - 25 Log ⊖	
	20° <⊖< 26.3°	-3.5	
	26.3° <⊖< 48°	32 - 25 Log ⊖	
	48° < 0 < 180°	-10	
Antenna Cross-Polarization		30 dB on Axis	
Antenna Noise			
Temperature	10° El	47° K	
	20° El	39° K	
	30° El	36° K	
VSWR	Тх	1.3:1	
	Rx	1.5:1	
Isolation (Port to Port) .	Тх	80 dB	
	Rx	35 dB	
Feed Interface	Tx	WR75 Flat Flange	
	Rx	WR75 Flat Flange	

(All specifications typical)

Mechanical Performance

Reflector Material		Glass Fiber Reinforced Polyester
Antenna Optics		One-Piece Offset Feed Prime Focus
Mount Type		Elevation over Azimuth
Elevation Adjustment Ranç	je	10° - 90° Continuous Fine Adjustment
Azimuth Adjustment Rang	B	360° Continuous
Mast Pipe Interface		73 - 76 mm (2.88 in - 3.00 in) Diameter
Wind Loading	Operational Survival	80 km/h (50 mph) 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/ft²
Shock and Vibration		As Encountered During Shipping and Handling

