1.2m Ka RxTx Class I Antenna System

Model# 12159

Model 12159 Antenna Product Specification

- Fine azimuth and elevation adjustment features
- ISO 9001:2008 Certificate of Registration
- Meets or exceeds regulatory agency requirements
- Anatel Type Approved No. 06645-17-06307

RF Performance

Effective Aperture		1.2m (48 in)
Operating Frequency	Tx	28.30-30.00 GHz
	Rx	18.10-20.20 GHz
Polarization		Circular RH or LH
Gain (±0.3 dB)	Tx	49.0 dBi @ 29.00 GHz
	Rx	45.6 dBi @ 19.20 GHz
3dB Beamwidth	Tx	0.56° @ 29.00 GHz
	Rx	0.83° @ 19.20 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)		
	100 λ/D < Θ < 20°	29 - 25 Log Θ dBi
	20° < Θ 26.3°	-3.5 dBi
	26.3° < Θ < 48°	32-25 Log Θ dBi
	48° < Θ < 180°	-10 dBi (averaged)
Antenna Cross-Polarization (within 1 dB B/W)		
	Tx	25 dB
	Rx	22 dB
Antenna Noise Temperature*		
	10° El	90K
	20° El	53K
	30° El	51K
VSWR		1.3:1 Max
Isolation (Port to Port)	Tx	90dB
	Rx	80dB

Mechanical Performance

Antenna Optics		One-Piece Offset Feed Prime Focus
Mount Type		Elevation over Azimuth
Elevation Adjustment Range		5° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range		360° Continuous, ±5° Fine
Mast Pipe Interface		73.2 mm (2.88 in) or 76 mm (3.00 in) Diameter O.D.
Wind Loading	Operational	56 km/h (35 mph)
	Survival	201 km/h (125 mph)
Temperature		-50°C to 80°C
Humidity		0 to 100% (Condensing)
Atmosphere		Standard Hardware Meets 720 Hour Salt Spray Test Requirements (ASTM B-117)
Solar Radiation		360 BTU/h/ft2
Shock and Vibration		As Encountered During Shipping and Handling

*Gain and Noise Temperature at Feed Horn Flange
(All Specifications Typical)

ROHS compliant

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