

1.2m KA RxTx Antenna System



Type 12358 Antenna Product Specification

- ISO 9001:2015
Certificate Of Registration



RF Performance

Effective Aperture.		1.2m (47in)
Operating Frequency	Tx.	28.00-30.00 GHz
	Rx.	18.10-20.20 GHz
Polarization.		Circular or Linear
Gain (±0.3 dB)	Tx.	49.5 dBi @ 30.0 GHz
	Rx.	46.3 dBi @ 20.2 GHz
3dB Beamwidth	Tx.	0.6° @ 30.0 GHz
	Rx.	0.9° @ 20.2 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)		
	Mainbeam < θ < 20°	29 - 25 Log θ dB
	20° < θ < 26.3°	-3.5 dB
	26.3° < θ < 48°	32-25 Log θ dB
	48° < θ < 180°	-10 dB
Antenna Cross-Polarization (within 1 dB b/w)		
	Tx.	25 dB
	Rx.	22 dB
Antenna Noise Temperature	30° Elev.	57° K
VSWR		1.2:1
Isolation (Port to Port)	Tx.	90 dB
	Rx.	75 dB
Feed Interface	Tx.	WR28 Flat Flange
	Rx.	WR42 Flat Flange

Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester
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, ±3° Fine Adjustment
Mast Pipe Size	2.88"(73mm) or 3.5" (88.9mm) diam.
Wind Loading.	Operational 72 km/h (45 mph)
	Survival (no repointing) 128 km/h (80 mph)
	Survival (repoint required) 201 km/h (125 mph)
	Survival (no breakaway) 257 km/h (160 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

*Heavier BUC can be placed underneath the boom arm.

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