

1.2M Ku-Band Rx/Tx Antenna

Series 1134

Technical Specifications

Electrical		Series 1134 Ku-Band
Antenna Size		1.2 M (48 in.)
Operating Frequency (GHz)	Receive Transmit	10.95 - 12.75 GHz 14.00 - 14.50 GHz
Midband Gain (+ .2dB)	Receive Transmit	41.50 dBi 43.00 dBi
Antenna Noise Temperature		
20° Elevation		46 K
30° Elevation		43 K
Sidelobe Envelope, Co-Pol (dBi)		
$100\lambda / D < \theta \leq 20^\circ$		29 - 25 Log θ dBi
$20^\circ < \theta \leq 26.3^\circ$		-3.5 dBi
$26.3^\circ < \theta \leq 48^\circ$		32 - 25 Log θ dBi
$\theta > 48^\circ$		-10 dBi (averaged)
Cross-Polarization	Within 1 dB contour Any Angle off Axis	-30 dB Max. -25 dB Max.
VSWR		1.3:1 Max.

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Feed
Mast Pipe Size	2 1/2" SCH 40 Pipe (2.88" OD) 73.2 mm.
Elevation Adjustment Range	5° to 90° Continuous Fine Adjustment
Azimuth Adjustment Range	+/- 20° Fine, 360° Continuous
Mount Type	Elevation over Azimuth
Shipping Specifications	90 lbs. (41 kg.)

Environmental Performance		
Wind Loading	Operational Survival	50 mph (80 km/h) 125 mph (201 km/h)
Temperature	Operational Survival	-40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)
Rain	Operational Survival	1/2"/hr 2"/hr
Ice	Operational Survival	----- 1/2" radial
Atmospheric Conditions		Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation		360 BTU/h/ft ²

GENERAL DYNAMICS
SATCOM Technologies

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