

95 CM Ku-Band Rx/Tx Antenna

Series 1952

Technical Specifications

Electrical		Series 1952 Ku-Band
Antenna Size		95 CM (38 In.)
Reflector Dimensions		53.00" X 26.50" Ellipse
Operating Frequency (GHz)	Receive Transmit	10.95 - 12.75 GHz 13.75 - 14.50 GHz
Midband Gain (+.2dB)	Receive Transmit	39.70 dBi 41.20 dBi
First Sidelobe (Typical)		-23 dB
Antenna Noise Temperature		
20° Elevation		43 K
30° Elevation		41 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
$\theta > 48$		-10 dBi (averaged)
Cross-Polarization		>30 dB on Axis
VSWR		1.3:1 Max.
Feed Interface		Available in a variety of designs

Mechanical	
Reflector Material	One Piece Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Feed Elliptical
Mount Type	Elevation over Azimuth Continuous Reflector Polarization
Mast Pipe Size	2.5" SCH 40 Pipe (2.88" OD) 7.32 cm
Elevation Adjustment Range	0° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous
Shipping Specifications	53 lbs.

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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