

0.98M Ku-Band Rx/Tx Antenna

Series 1985

Technical Specifications

Electrical		Series 1985 Ku-Band
Antenna Size		0.98 M (38.22 in.)
Operating Frequency (GHz)	Receive Transmit	10.95 - 12.75 GHz 13.75 - 14.50 GHz
Midband Gain (+ .2dB)	Receive Transmit	39.80 dBi 41.30 dBi
Polarization		Linear
3 dB Beamwidth	Receive Transmit	1.80° 1.50°
Feed Interface		WR75
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)
3 dB Beamwidth	Receive Transmit	>30 dB min. on axis >30 dB min. within 1 dB contour
VSWR		1.3:1 Max.

Mechanical		
Reflector Material		Glass Fiber Reinforced Polyester SMC
Antenna Optics		One Piece Offset, Prime Focus
Mount Type		Elevation over Azimuth
Mast Pipe Size		2.5" SCH 40 Pipe (2.875" OD) 73.00 cm.
Elevation Adjustment Range		50 _ 9j)o Continuous Fine Adjust
Azimuth Adjustment Range		360° Continuous Coarse Adjust
Shipping Specifications		50 Lbs. (23 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/ft2

GENERAL DYNAMICS SATCOM Technologies

1500 Prodelin Drive • Newton, NC 28658 USA • Telephone: +1-828-464-4141 • Fax: +1-828-464-4147
Email: vsat@gdsatcom.com • Web Site: www.gdsatcom.com

1000-023 Rev. 02/12