0.98M Ku-Band Rx/Tx Antenna

Series 1983

Technical Specifications

Electrical		Series 1983 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
Antenna Noise Temperature 20° Elevation 30° Elevation		 47 K 46 K
Sidelobe Envelope, Co-Pol (dBi) $100\lambda / D \leq \theta \leq 20°$ $20° < \theta \leq 26.3°$ $26.3° < \theta \leq 48°$ $48° < \theta$		 29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)
Cross-Polarization Within B.P.E An 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
Mount Type	Elevation over Azimuth
Mast Pipe Size	2.5" SCH 40 Pipe (2.88" OD) 7.32 cm
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	+ 20° Fine, 360° Continuous
Shipping Specifications	80 lbs. (36 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

1000-021 Rev. 02/12