

1.0M Ku-Band Rx/Tx

Series 1100

Technical Specifications

Electrical		Series 1120 Ku-Band
Antenna Size		1.0 M (40 in.)
Operating Frequency (GHz)	Receive Transmit	10.95 - 12.75 GHz 13.75 - 14.50 GHz
Midband Gain (+/- .5dB)	Receive Transmit	40.5 dBi 41.5 dBi
Antenna Noise Temperature	20° Elevation 30° Elevation	46 K 43 K
Sidelobe Envelope, 100λ/D ≤ θ ≤ 20° 20° < θ ≤ 26.3° 26.3° < θ ≤ 48° 48° < θ		29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)
Max. Tx Weight		Tier 1 = 6 lbs. Tier 2 = 12 lbs.
Insertion Loss		0.2 dB max.
Cross-Pol Isolation (Linear)		>30 dB (on axis)
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" SCH 40 Pipe (2.38" OD) 6.03 cm
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous, Coarse
Shipping Specifications	60 lbs. (22.2 kg.)

Environmental Performance		
Wind Loading	Operational Survival	45 mph (72 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

1000-008 Rev. 02/12