

1.0M KU-BAND

RX/TX

SERIES

1100

**Electrical**

**Series 1100  
Ku-Band**

Antenna Size		1.0 M (40 in.)
Operating Frequency (GHz)	Receive	10.95 - 12.75
	Transmit	13.75 - 14.5
Midband Gain ( $\pm$ .2dB)	Receive	40.5 dBi
	Transmit	41.5 dBi
Antenna Noise Temperature	20° elevation	47 K
	30° elevation	46 K
Sidelobe Envelope, Co-Pol (dBi)	$1^\circ \leq \theta \leq 20^\circ$	29-25 Log $\theta$
	$20^\circ < \theta \leq 26.3^\circ$	- 3.5 dBi
	$26.3^\circ < \theta \leq 48^\circ$	32 -25 Log $\theta$
	$48^\circ < \theta$	-10 dBi (averaged)
Max. Tx Weight		Tier 1 = 6 lbs.
		Tier 2 = 12 lbs.
Insertion Loss		0.2 dB max.
Cross-Pol Isolation		>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		50 lbs. (23 kg.)

**Environmental Performance**

Wind Loading	Operational	45 mph (72 km/h)
	Survival	125 mph (201 km/h)
Temperature	Operational	-40° to 140° F (-40° to 60° C)
	Survival	-50° to 160° F (-46° to 71° C)
Rain	Operational	1/2" /hr
	Survival	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 <sup>2</sup>

**GENERAL DYNAMICS**  
C4 Systems

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