

2.4 & 3.8M C & Ku-Band Dual Optics

Series 1254 & 1388

Technical Specifications

Electrical		Series 1254	Series 1388
Antenna Size		2.4 M (96 in.)	3.8 M (96 in.)
Operating Frequency (GHz)	Receive	3.625 - 4.20 GHz	10.95 - 12.75 GHz
	Transmit	5.850 - 6.425 GHz	13.75 - 14.50 GHz
Midband Gain (+/- .2 dB)	Receive	38.00 dBi	51.30 dBi
	Transmit	42.00 dBi	52.40 dBi
Antenna Noise Temperature			
10° Elevation		42 K	39 K
20° Elevation		36 K	36 K
30° Elevation		35 K	34 K
40° Elevation		34 K	32 K
Sidelobe Envelope, Co-Pol (dBi)			
100λ / D ≤ θ ≤ 20°		29 - 25 Logθ dBi	29 - 25 Logθ dBi
20° < θ ≤ 26.3°		-3.5 dBi	-3.5 dBi
26.3° < θ ≤ 48°		32 - 25 Logθ dBi	32 - 25 Logθ dBi
48° < θ		-10 dBi (averaged)	-10 dBi (averaged)
Cross-Pol Isolation (Linear)		35 dB within 1 dB Beamwidth	35 dB within 1 dB Beamwidth
VSWR		1.3:1 Max.	1.3:1 Max.
Feed Interface	Receive	CPR 229 F	WR 75
	Transmit	CPR 137 or Type N	WR 75 or Direct Radio Mounting

Mechanical		
Reflector Material		Glass Fiber Reinforced Polyester SMC
Antenna Optics		2 Pc. , Offset Fed (Gregorian)
Mast Pipe Size		6" SCH 40 Pipe (6.63" OD) 16.83 mm.
Elevation Adjustment Range		5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range		+ 45° Fine, 360° Continuous
Mount Type		Elevation over Azimuth
Shipping Specifications		385 lbs. (174 kg.)
		1,675 lbs. (765 kg.)

Environmental Performance		
Wind Loading	Operational	50 mph (80 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

GENERAL DYNAMICS SATCOM Technologies

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