STEP ELECTRONICS
A Division of Av-Comm

GENERAL DYNAMICS
SATCOM Technologies

1.8m C & Ku-Band High Wind
Series 2194

Technical Specifications

Electrical		Series 2194 C-Band	Series 2194 Ku-Band
Antenna Size		1.8 M (71 in.)	1.8 M (71 in.)
Operating Frequency (GHz)	Receive Transmit	3.625 - 4.20 GHz 5.85 - 6.425 GHz	10.95 - 12.75 GHz 13.75 - 14.50 GHz
Midband Gain (+/- .2 dB)	Receive Transmit	35.50 dBi 39.50 dBi	45.20 dBi 46.70 dBi
Polarization		Circular or Linear	Linear
Feed Interface	Receive Transmit	WR229| Type N or WR137	WR75
Cross-Polarization		-30 dB within B.P.E. (linear) 15.5 dB Rx, 17.7 dB Tx (circular)	-30 dB on axis
Axial Ratio		1.3 VAR (2.28 dB) Tx, 1.4 VAR (2.95 dB) Rx	N/A
VSWR		1.3:1 Max.	1.3:1 Max. Tx, 1.5:1 Max. Rx

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Feed
Mast Pipe Size	6" SCH 40 Pipe (6.62" OD) 16.83 cm.
Elevation Adjustment Range	15° to 80°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous Coarse Adjust, ±10° Fine Adjustment

Environmental Performance		
Wind Loading	Operational Survival	65mph (104km/h) with 0.5 dB loss @ 14.25 GHz 75mph (120km/h) with 1.0 dB loss @ 14.25 GHz 75mph (120km/h) with 0.5 dB loss @ 6.14 GHz 90mph (145km/h) with 1.0 dB loss @ 6.14 GHz 150mph (240km/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

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