

## Technical Specifications

Electrical	Series 1194 C-Band		Series 1194 Ku-Band
Antenna Size	1.8M (71 in.)		1.8M (71 in.)
Operating Frequency (GHz)			
Receive	3.625 - 4.20 GHz		10.95 - 12.75 GHz
Transmit	5.85 - 6.425 GHz		13.75 - 14.50 GHz
Midband Gain ( +/- .2dB)			
Receive	35.50 dBi		45.20 dBi
Transmit	39.50 dBi		46.70 dBi
Antenna Noise Temperature	Linear	Circular	
20° Elevation	49 K	23 K	38 K
30° Elevation	37 K	21 K	35 K
Sidelobe Envelope, Co-Pol (dBi)			
100MD < $\theta$ $\leq$ 20°	29 - 25 Log $\theta$ dBi	29 - 25 Log $\theta$ dBi	29 - 25 Log $\theta$ dBi
20° < $\theta$ $\leq$ 26.3°	-3.5 dBi	-3.5 dBi	-3.5 dBi
26.3° < $\theta$ $\leq$ 48°	32 - 25 Log $\theta$ dBi	32 - 25 Log $\theta$ dBi	32 - 25 Log $\theta$ dBi
$\theta$ > 48°	-10 dBi (averaged).	-10 dBi (averaged)	-10 dBi (averaged)
Cross-Pol Isolation			
Within B.P.E.	-26 dB Max.		-30 dB Max.
Any Angle off Axis	-23 dB Max.		-25 dB Max.
VSWR	1.3:1 max		1.3:1 Max. Tx, 1.5:1 Max. Rx
Axial Ratio (circular)			
Receive	1.4 VAR (2.95 dB)		
Transmit	1.3 VAR (2.28 dB)		
Feed Interface			
Receive	CPR 229 F		Available in a variety of designs
Transmit	CPR 137 or Type N		Available in a variety of designs

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Feed
Mast Pipe Size	5" SCH 40 Pipe (5.56" OD) 141 mm.
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	+/- 45° Fine, 360° Continuous
Shipping Specifications	C-Band: 245 lbs. (111 kg.) Ku-Band: 235 lbs. (106.5 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
Solar Radiation	360 BTU/h/ft <sup>2</sup>