

# 1.2, 1.8, 2.4 & 3.8M X-Band

## Series 1134, 1194, 1244 & 1383

### Technical Specifications

Electrical	Series 1134 X-Band	Series 1194 X-Band	Series 1244 X-Band	Series 1383 X-Band
Antenna Size	1.2 M	1.8 M	2.4 M	3.8 M
Operating Frequency (GHz)				
Receive	7.25 - 7.75 GHz	7.25 - 7.75 GHz	7.25-7.75 GHz	7.25-7.75 GHz
Transmit	7.90 - 8.40 GHz	7.90 - 8.40 GHz	7.90-8.40 GHz	7.90-8.40 GHz
Midband Gain (+/- .5dB) / (+/- 2 dB (3.8M))	37.4 dBi 38.1 dBi	40.9 dBi 41.6 dBi	43.7 dBi 44.4 dBi	47.6 dBi 48.3 dBi
Sidelobe Compliant	DSCS Req.	DSCS Req.	DSCS Req.	DSCS Req.
Axial Ratio	1.0 dB	1.0 dB	1.0 dB	1.0 dB
VSWR	1.25:1 Max.	1.25:1 Max.	1.25:1 Max.	1.25:1 Max.
Antenna Noise Temp (Clear Sky)				
10°	50 K	43 K	38 K	60 K
20°	45 K	38 K	33 K	53 K
30°	42 K	35 K	29 K	47 K
Port to Port Isolation	20dB	20dB	20dB	20dB

Mechanical	Series 1134 X-Band	Series 1194 X-Band	Series 1244 X-Band	Series 1383 X-Band
Reflector Material	Glass fiber reinforced polyester SMC			
Antenna Optics	One piece, offset feed, prime focus		Four piece, offset feed, prime focus	
Mount Type	Elevation over azimuth			
Elevation Adjustment Range	5° to 90°, continuous fine adjustment			12° to 90°, (0° to 15° Inverted)
Azimuth Adjustment Range	360° continuous, +30° fine adjustment			
Mast Pipe Size	2.5" SCH 40 pipe (2.88" OD)	5" SCH 40 pipe (5.6" OD)	6" SCH 40 Pipe (6.62" OD)	10" SCH 40 pipe (10.75" OD)

Environmental Performance		
Wind Loading	Operational Survival	50 mph (80 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	

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