

# Series 1134, 1194, 1244 & 1383 X-Band

## X-Band Specification Sheet

### Technical Specifications

Electrical	1134 X-Band	1194 X-Band	1244 X-Band	1383 X-Band
Antenna Aperture	1.2 M	1.8 M (71in.)	2.4 M (96in.)	3.8 M
Operating Frequency (GHz)	7.25-7.75 GHz	7.25 - 7.75 GHz	7.25-7.75 GHz	7.25 - 7.75 GHz
	7.90-8.40 GHz	7.9 - 8.40 GHz	7.90-8.40 GHz	7.9 - 8.40 GHz
Midband Gain (± .5db)	37.4 dBi	40.9 dBi	43.7 dBi	47.6 dBi
± 2db (3.8M)	38.1 dBi	41.6 dBi	44.4 dBi	48.3 dBi
Sidelobe compliant with	DSCS Req.	DSCS Req.	DSCS Req.	DSCS Req.
Axial Ratio Rx/Tx	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°	50K	43K	38K	60K
20°	45K	38K	33K	53K
30°	42K	35K	29K	47K
Port to Port Isolation	20dB	20dB	20dB	20dB

### Mechanical

Reflector Material	Glass fiber reinforced polyester SMC			
Antenna Optics	One piece, offset feed, prime focus	One piece, offset feed, prime focus	Four 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	5° to 90°, continuous adjustment	5° to 90°, continuous 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) 141 mm	6" SCH 40 Pipe (6.62" OD)	10" SCH 40 pipe 16.8cm(10.75" OD) 27.30

### 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>	