

# Specifications

Series 1244

<b>Electrical</b>		<b>C-Band</b>		<b>Ku-Band</b>
		<i>Linear</i>	<i>Circular</i>	
Antenna Size		2.4 M (8 ft.)	2.4 M (8 ft.)	2.4 M (8 ft.)
Operating Frequency	Receive	3.625 - 4.2 GHz	3.625 - 4.2 GHz	10.95 - 12.75 GHz
	Transmit	5.850 - 6.425 GHz	5.850 - 6.425 GHz	14.0 - 14.5 GHz
Midband Gain (± .2dB)	Receive	38.0 dBi	38.0 dBi	47.6 dBi
	Transmit	42.0 dBi	42.0 dBi	49.2 dBi
Antenna Noise Temperature				
	20° elevation	46° K	23° K	32° K
	30° elevation	45° K	20° K	28° K
Axial Ratio	Receive	N/A	1.3 VAR (2.28 dB)	N/A
	Transmit	N/A	1.3 VAR (2.28 dB)	N/A
Sidelobe Envelope, Co-Pol				
	100 $\lambda$ /D $\alpha$ $\leq$ 20°	29-25 Log $\alpha$ dBi	29-25 Log $\alpha$ dBi	29-25 Log $\alpha$ dBi
	20° < $\alpha$ $\leq$ 26.3°	-3.5 dBi	-3.5 dBi	-3.5 dBi
	26.3° < $\alpha$ $\leq$ 48°	32-25 Log $\alpha$ dBi	32-25 Log $\alpha$ dBi	32-25 Log $\alpha$ dBi
	$\alpha$ > 48°	-10 dBi (averaged)	-10 dBi (averaged)	-10 dBi (averaged)
VSWR		1.3:1 Max.	1.3:1 Max.	1.3:1 Max.
Cross-Polarization		-30 dB on axis	N/A	-30 dB within B.P.E.
<b>Mechanical</b>				
Reflector Material		Glass fiber reinforced polyester SMC		
Antenna Optics		Four piece, offset feed, prime focus		
Mount Type		Elevation over azimuth		
Elevation Adjustment Range		5° to 90°, continuous fine adjustment		
Azimuth Adjustment Range		360° continuous, +30° fine adjustment		
Mast Pipe Size		6" SCH 40 pipe (6.62" OD) 16.80 cm.		
<b>Environmental Performance</b>				
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>		
Shipping Specifications		484 lbs. (218 kg.)		



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