

Receive/Transmit

Series 1250

2.4M

C & KU-BAND

RX/TX

SERIES

1250

Electrical		C-Band		
		Linear	Circular	Ku-Band
Antenna Size		2.4 M (96 in.)	2.4 M (96 in.)	2.4 M (96 in.)
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	13.75 - 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				
	10° elevation	52 K	30 K	42 K
	20° elevation	46 K	23 K	32 K
	30° elevation	45 K	20 K	28 K
	40° elevation	44 K	19 K	27 K
Sidelobe Envelope, Co-Pol (dBi)				
	100λ / D θ ≤ 20°	29-25 Log θ dBi	29-25 Log θ dBi	29-25 Log θ dBi
	20° < θ ≤ 26.3°	-3.5 dBi	-3.5 dBi	-3.5 dBi
	26.3° < θ ≤ 48°	32 -25 Log θ dBi	32 -25 Log θ dBi	32 -25 Log θ dBi
	θ > 48°	-10 dBi (averaged)	-10 dBi (averaged)	-10 dBi (averaged)
Cross-Pol Isolation (Linear)		>30 dB on axis	N/A	>30 dB on axis
Axial Ratio (Circular)	Receive	N/A	2.28	N/A
	Transmit	N/A	1.94	N/A
VSWR		1.3:1 Max.	1.3:1 Max.	1.3:1 Max.
Feed Interface	Receive	CPR 229 F	CPR 229 F	WR 75
	Transmit	CPR 137 or Type N	CPR 137 or Type N	WR 75 or Direct Radio Mounting

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Feed, Two-Piece Divided Along Major Axis
Mast Pipe Size	6" SCH 40 Pipe (6.63" OD) 16.83 cm.
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous, ±5° Fine
Mount Type	Elevation over Azimuth
Shipping Specifications	385 lbs. (174 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/ft²	

