

1.2M Ku-Band Rx/Tx High Wind Antenna

Series 2120

Technical Specifications

Electrical		Series 2120 Ku-Band
Antenna Size		1.2 M (47.00 in.)
Operating Frequency (GHz)	Receive Transmit	10.70 - 12.75 GHz 13.75 - 14.50 GHz
Midband Gain (+ .2dB)	Receive Transmit	41.40 dBi 43.30 dBi
Antenna Noise Temperature		
20° Elevation		57 K
30° Elevation		56 K
Sidelobe Envelope, Co-Pol (dBi)		
100λ / D < θ ≤ 20°		29 - 25 Logθ dBi
20° < θ ≤ 26.3°		-3.5 dBi
26.3° < θ ≤ 48°		32 - 25 Logθ dBi
θ > 48°		-10 dBi (averaged)
Cross-Polarization		
On Axis		Tx: 35 dB Rx: 30 dB
Within B.P.E		Tx: 27 dB Rx: 25 dB
VSWR		Tx: 1.3:1 Max Tx: 1.5:1 Max

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC
Antenna Optics	Single Piece Offset, Prime Focus
Mast Pipe Size	2.50" Sch 40 Pipe (2.88" OD) 73.2 mm (72mm min., 74mm max.)
Elevation Adjustment Range	5° - 90° Continuous Fine Adjust
Azimuth Adjustment Range	360° Cont. Coarse Adj., ±15° Fine Adjust
Polarization Adjustment Range	±90° Continuous Coarse Adjust
Maximum Transmitter Weight	12 lbs.
Feed Support Tailpiece	Available as needed
Shipping Specifications	90 lbs. (41 kg.)

Environmental Performance		
Wind Loading	Operational Survival Survival (no perm. damage) Survival (no breakaway)	65 mph (104 km/h) - 0.5 dB Loss @ 14.25 GHz 90 mph (144 km/h) - No Repoint Required 125 mph (201 km/h) - No Permanent Damage 150 mph (240 km/h) - No Breakaway
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	

GENERAL DYNAMICS

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