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 30° Elevation		57 K 56 K
Sidelobe Envelope, Co-Pol (dBi) 100λ / D $< \theta \le 20^{\circ}$ $20^{\circ} < \theta \le 26.3^{\circ}$ $26.3^{\circ} < \theta \le 48^{\circ}$ $\theta > 48^{\circ}$		29 - 25 Log⊕ dBi -3.5 dBi 32 - 25 Log⊕ dBi -10 dBi (averaged)
Cross-Polarization On Axis Within B.P.E		Tx: 35 dB Rx: 30 dB 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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