

# 1.2m Ka-Band Receive Only Antenna Series 3122



*Your Trusted Source for Satellite Equipment*

## P120KA-RO

Electrical		Ka-Band Circular	Ka-Band Linear
Antenna Size		1.2m	1.2m
Operating Frequency (GHz)	Receive	19.20 - 20.20GHz	18.20 - 21.20GHz
Midband Gain ( $\pm 2$ dB)	Receive	46.00dBi	46.00dBi
VSWR		1.3:1	1.5:1
Pattern Beamwidth (In Degrees at Midband)	-3dB -15dB	Rx: 0.90° Rx: 2.00°	Rx: 0.90° Rx: 2.00°
Sidelobe Envelope, Co-Pol (dBi) 100 $\lambda$ /D < $\theta \leq 20^\circ$ 20° < $\theta \leq 26.3^\circ$ 26.3° < $\theta \leq 48^\circ$ $\theta > 48^\circ$		29 - 25Log $\theta$ dBi -3.5dBi 32 - 25Log $\theta$ dBi -10dBi (Averaged)	29 - 25Log $\theta$ dBi -3.5dBi 32 - 25Log $\theta$ dBi -10dBi (Averaged)
Antenna Noise Temperature 5° Elevation 10° Elevation 20° Elevation 40° Elevation		165K 124K 94K 86K	168K 127K 97K 79K
Power Handling		N/A	N/A
Cross Polarization Isolation On Axis Within 1.0dB Beamwidth		17.70dB 17.70dB	30.00dB 26.00dB
Output Waveguide Interface Flange		Rx: WR42	Rx: WR42

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC, Ka Band Formulation
Antenna Optics	1 Piece Offset, Prime Focus
Mast Pipe Size	2.5" SCH 40 Pipe (2.88" OD) 73.2mm
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous Coarse Adjustment, $\pm 10^\circ$ Fine Adjustment
Shipping Specifications	Approx. Net Weight: 69lbs. (31kg.) Approx. Packaged Weight: 85lbs. (39kg.)

Environmental Performance	
Wind Loading Operational Survival	50mph (80km/h) 125mph (201 km/h)
Temperature (Operational)	-40° to 140°F (-40° to 60°C)
Rain (Operational)	½"/hr.
Ice (Operational)	-----
Atmospheric Conditions	Salt, Pollutants, and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation	360 BTU/h/ft <sup>2</sup>

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Specifications are subject to change without notice

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