

1.8m Ka-Band Receive Only Antenna Series 3180



P180KA-RO

Your Trusted Source for Satellite Equipment

Electrical		Ka-Band Circular	Ka-Band Linear
Antenna Size		1.8m	1.8m
Operating Frequency (GHz)	Receive	19.20 - 20.20GHz	18.20 - 21.20GHz
Midband Gain (± 2 dB)	Receive	49.50dBi	49.50dBi
VSWR		1.3:1 Max	1.5:1 Max
Pattern Beamwidth (In Degrees at Midband)	-3dB -15dB	0.60° 1.30°	0.60° 1.30°
Sidelobe Envelope, Co-Pol (dBi) 100 λ /D < $\theta \leq 20^\circ$ 20° < $\theta \leq 26.3^\circ$ 26.3° < $\theta \leq 48^\circ$ $\theta > 48^\circ$		29 - 25Log θ dBi -3.5dBi 32 - 25Log θ dBi -10dBi (Averaged)	29 - 25Log θ dBi -3.5dBi 32 - 25Log θ dBi -10dBi (Averaged)
Antenna Noise Temperature 5° Elevation 10° Elevation 20° Elevation 40° Elevation		149K 118K 95K 81K	152K 121K 98K 84K
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		WR42	WR42

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC, Ka Band Formulation
Antenna Optics	1 Piece Offset, Prime Focus
Mast Pipe Size	5.0" SCH 40 Pipe (5.56" OD) 14.1cm
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous Coarse Adjustment, $\pm 15^\circ$ Fine Adjustment
Shipping Specifications	Approx. Net Weight: 245lbs. (111kg.) Approx. Packaged Weight: 295lbs. (134kg.)

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 ²

KA-BAND_P180KA_RO_REV002
Specifications are subject to change without notice

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