1.8 Meter C & Ku-Band Rx/Tx Antenna Series 1183

Technical Specifications

Electrical	C-Band Linear	C-Band Circular	Ku-Band Linear
Antenna Size	1.8M (71 in.)	1.8M (71 in.)	1.8M (71 in.)
Operating Frequency (GHz) Receive Transmit	 3.625 - 4.20 GHz 5.85 - 6.425 GHz	 3.625 - 4.20 GHz 5.85 - 6.425 GHz	 10.70 - 12.75 GHz 13.75 - 14.50 GHz
Midband Gain (+/- .2dB) Receive Transmit	 35.50 dBi 39.50 dBi	 35.30 dBi 39.30 dBi	 44.80 dBi 46.80 dBi
Antenna Noise Temperature 10° Elevation 20° Elevation 30° Elevation 40° Elevation	 45 K 41 K 41 K 40 K	 45 K 41 K 41 K 40 K	 69 K 64 K 63 K 62 K
Sidelobe Envelope, Co-Pol (dBi) 100λ/D ≤θ ≤ 20° 20° <θ ≤ 26.3° 26.3° <θ ≤ 48° 48° <θ	 29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged).	 29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)	 29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)
Cross-Pol Isolation (Linear) On Axis With 1.0 dB Beamwidth	 30 dB 26 dB	 17.7 dB Tx 15.5 dB Rx 17.7 dB Tx 15.5 dB Rx	 30 dB 26 dB
VSWR	1.3:1 Max.	1.3:1 Max.	1.3:1 Max. Tx 1.5:1 Max. Rx
Output Waveguide Interface Flange	WR137 or N Tx WR229 Rx	WR137 or N Tx WR229 Rx	WR75 WR229 Rx
Power Handling	1 kW	1 kW	100 W

Mechanical			
Reflector Material	Glass fiber reinforced polyester SMC		
Antenna Optics	Prime Focus, One-Piece, Offset Feed		
Mount Type	Elevation over Azimuth		
Mast Pipe Size	3.5" SCH 40 Pipe (4.0" OD) 10.16 cm.		
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment		
Azimuth Adjustment Range	360° Continuous		
Shipping Specifications (Approx. Net Weight)	180 lbs. (82kg.)	185 lbs. (84kg.)	170 lbs. (78kg.)

Environmental Performance	
Wind Loading Operational Survival	 45 mph (72 km/h) 125 mph (201 km/h)
Temperature (operational) Operational	 -40° to 140° F (-40° to 60° C)
Rain (operational) Operational	 1/2" (13 mm)/hr
Ice Operational	 ------
Atmospheric Conditions	Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas
Relative Humidity	0 to 100% With Condensation
Solar Radiation	360 BTU/h/ft2

Contact us at CustomerCareSAT@cpii.com or call us at +1 770-689-2040. The data should be used for basic information only.
Formal, controlled specifications may be obtained from CPI for use in equipment design.

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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.