

1.8 Meter C-Band Antenna

Receive Transmit

Series 1182

Technical Specifications

Electrical		C-Band Linear Polarity	C-Band Circular Polarity
Antenna Size		1.8M (71 in.)	
Operating Frequency	Rx	3.400-4.200 GHz	3.625-4.200 GHz
	Tx	5.850-6.725 GHz	5.850-6.425 GHz
Midband Gain (+/- .3dB)	Rx	35.4 dBi	35.5 dBi
	Tx	39.6 dBi	39.5 dBi
3 dB Beam Width	Rx	3.0°	3.0°
	Tx	1.9°	1.9°
Sidelobe Envelope, Co-Pol, dBi	100λ / D < Θ ≤ 20°	29 – 25 Log Θ dBi	
	20° < Θ ≤ 26.3°	-3.5 dBi	
	26.3° < Θ ≤ 48°	32 – 25 Log Θ dBi	
	48° < Θ < 180°	-10 dBi (Typical)	
Antenna Noise Temp	10° Elevation	56 K	58 K
	20° Elevation	49 K	53 K
	30° Elevation	45 K	46 K
Cross Pol Isolation	Rx	> 30 dB (On Axis)	15.3 dB Min (AR = 3.0 dB)
	Tx		17.5 dB Min (AR = 2.3 dB)
VSWR		1.4:1 max	1.3:1 max
Feed Interface	Rx	CPR 229G	
	Tx	CPR 137G	

Mechanical	
Reflector Material	One Piece Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset, 0.6 F/D
Mount Type	Elevation over Azimuth
Mast Pipe Size	3-1/2" SCH 40 Pipe (4.00" OD) 10.16 cm.
Elevation Adjustment Range	10° to 80° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous, +/- 10° Fine Adjustment

Environmental Performance		
Wind Loading	Operational	50 mph (80 km/h)
	Survival	125 mph (201 km/h)
Temperature	Operational	-40° to 140° F (-40° to 60° C)
	Survival	-50° to 160° F (-46° to 71° C)
Rain	Operational	1/2 inch/h
Ice	Survival	1/2" radial
Atmospheric Conditions		Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation		360 BTU/h/ft2

Contact us at CustomerCareSAT@cpil.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.



Satcom & Antenna Technologies Division
 1700 NE Cable Drive
 Conover, NC
 USA 28613

tel +1 770-689-2040
 1 888-874-7646 (In North America)
 1 619-240-8480 (Outside North America)
 email CustomerCareSAT@cpil.com
 web www.cpil.com

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.

©2020 Communications & Power Industries LLC. Company proprietary: use and reproduction is strictly prohibited without written authorization from CPI.

Series1182 C-Band RxTx 05-2021P