

Technical Specifications

Electrical		Ka-Band Circular	Ka-Band Circular	Ka-Band Linear
Antenna Size		2.4 M	2.4 M	2.4 M
Operating Frequency (GHz)	Receive Transmit	19.40 - 21.20 GHz 29.20 - 31.00 GHz	20.20 - 21.20 GHz 30.00 - 31.00 GHz	18.70 - 21.20 GHz 27.00 - 31.00 GHz
Antenna Gain at Midband (± .2dB)	Receive Transmit	51.50 dBi 54.30 dBi	51.60 dBi 54.40 dBi	51.40 dBi 54.30 dBi
VSWR		1.3:1 max	1.3:1 max	Rx: 1.5:1 max Tx 1.3:1 max
Pattern Beamwidth (in degrees at midband)	-3dB -15dB	Rx: 0.42° Tx: 0.29° Rx: 0.95° Tx: 0.64°	Rx: 0.42° Tx: 0.29° Rx: 0.95° Tx: 0.63°	Rx: 0.42° Tx: 0.28° Rx: 0.95° Tx: 0.63°
Sidelobe Envelope, Co-Pol (dBi)				
100λ/D ≤ θ ≤ 20°		29 - 25 Log θ dBi	29 - 25 Log θ dBi	29 - 25 Log θ dBi
20° < θ ≤ 26.3°		-3.5 dBi	-3.5 dBi	-3.5 dBi
26.3° < θ ≤ 48°		32 - 25 Log θ dBi	32 - 25 Log θ dBi	32 - 25 Log θ dBi
θ < 48°		-10 dBi (averaged).	-10 dBi (averaged)	-10 dBi (averaged)
Antenna Noise Temperature	5° Elevation 10° Elevation 20° Elevation 40° Elevation	154 K 128 K 108 K 97 K	154 K 128 K 108 K 97 K	158 K 131 K 103 K 100 K
Power Handling		100 W	100 W	100 W
Cross Polarization Isolation	On Axis Within 1.0 dB Beamwidth	Rx: 17.70 dB Tx: 21.30 dB Rx: 17.70 dB Tx: 21.30 dB	24.80 dB 24.80 dB	Rx: 30.00 dB Tx: 35.00 dB 26.00 dB

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC, Ka-Band Formulation
Antenna Optics	4-piece Offset, Prime Focus
Mast Pipe Size	6" SCH 80 Pipe (6.62" OD) 16.8 CM
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous Coarse Adjustment, ±45° Fine Adjustment
Shipping Specifications	Net Weight: 545 lbs. (248 kg.) Packaged Weight: 885 lbs. (402 kg.)

Environmental Performance	
Wind Loading	Operational Survival 50 mph (80 km/h) 125 mph (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
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.



**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@cpii.com
web www.cpii.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.