1.8 & 2.4 Meter Dual Axis C or Ku-Band VSAT Antenna

Series 1185 & 1256

Technical Specifications

Electrical	Series 1185		Series 1256	
	C-Band	Ku-Band	C-Band	Ku-Band
Antenna Size	1.8M (71 in.)		2.4 M (96 in.)	
Operating Frequency (GHz) Receive Transmit	 3.625 - 4.20 GHz 5.85 - 6.425 GHz	 10.95 - 12.75 14.00 - 14.50	 3.625 - 4.20 5.85 - 6.425	 10.95 - 12.75 14.00 - 14.50
Midband Gain (+/- .2dB) Receive Transmit	 35.50 dBi 39.50 dBi	 45.00 dBi 46.50 dBii	 38.00 dBi 42.00 dBi	 47.60 dBi 49.20 dBi
Antenna Noise Temperature (linear) 10° Elevation 20° Elevation 30° Elevation 40° Elevation	 56 K 49 K 47 K 46 K	 49 K 38 K 35 K 34 K	 52 K 46 K 45 K 44 K	 42 K 32 K 28 K 27 K
Antenna Noise Temperature (circular) 10° Elevation 20° Elevation 30° Elevation 40° Elevation	 30 K 23 K 21 K 20 K		 29 K 22 K 20 K 19 K	
Cross-Pol Isolation (Linear)	>30 dB (on axis)		>30 dB (on axis)	
Sidelobe Envelope, Co-Pol (dBi) $100\lambda/D \leq \theta$ $7° < \theta \leq 9.2°$ $9.2° < \theta \leq 48°$ $48° < \theta$	 29 - 25 Log θ dBi -3.5 dBi 32 - 25 Log θ dBi -10 dBi (averaged)		 29 - 25 Log θ dBi -3.5 dBi 32 - 25 Log θ dBi -10 dBi (averaged)	
VSWR	1.3:1 max		1.3:1 max	-30 dB within B.P.E.

Mechanical		
Reflector Material	Glass fiber reinforced polyester SMC	
Mount Type	Dual Axis Motorized, Elevation over Azimuth, Galvanized Steel Construction	
Elevation Adjustment Range	10°to 80°	
Azimuth Adjustment Range	360° Continuous	
Angular Tracking Travel	Elevation +/- 10° ; Azimuth +/- 10° (within adjustment range)	
Actuators	Recirculating Ballscrews	
Interface	Electrically to ACU	
Antenna Optics, Prime Focus	One Piece Offset Feed	Four Piece Offset Feed
Tracking Accuracy	0.10°	0.10°
Mast Pipe Size	3.5" SCH 40 Pipe (4.0" OD) 10.16 cm.	6" SCH 40 Pipe (6.63" OD) 16.83 cm.
Shipping Specs. (Approx. Net Wt.)	445 lbs. (200 kg.)	680 lbs. (306 kg.)

Environmental Performance		
Wind Loading	Operational Survival	45 mph (72 km/h) 125 mph (201 km/h)
Temperature	Operational Survival	- 40°to 140°F (- 40°to 60°C) -22° to 160° F (-30° to 71° C)
Rain	Operational Survival	½" / hr 2" /hr
Ice	Operational Survival	-------- 1/2" radial
Atmospheric Conditions	Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas	
Solar Radiation	360 BTU/h/ft2	

Communications & Power Industries

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.

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