1.8 & 2.4M Dual Axis C or Ku-Band VSAT Antennas

Series 1185 & 1256

Technical Specifications

Electrical		Series 1185		Series 1256	
		C-Band	Ku-Band	C-Band	Ku-Band
Antenna Size		1.8 M (71 in.)		2.4 M (96 in.)	
Operating Frequency (GHz)	Receive Transmit	3.625 - 4.20 5.85 - 6.425	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 (+/- .2 dB)	Receive Transmit	35.50 dBi 39.50 dBi	45.00 dBi 46.50 dBi	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, $100\lambda/D \leq \theta \leq 20°$ $7° < \theta \leq 9.2°$ $9.2° < \theta \leq 48°$ $48° < \theta$		 29 - 25 Logq dBi -3.5 dBi 32 - 25 Logq dBi -10 dBi (averaged)		 29 - 25 Logq dBi -3.5 dBi 32 - 25 Logq 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 (4.00" OD) 10.16 cm.	6" SCH 40 Pipe (6.63" OD) 16.83 cm.
Shipping Specifications	445 lbs. (200 kg.)	680 lbs. (306 kg.)

Environmental Performance		
Wind Loading	Operational Survival	45 mph with .2° pointing error (72km/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

GENERAL DYNAMICS
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