

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	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	45.00 dBi 46.50 dBi	38.00 dBi 42.00 dBi	47.60 dBi 49.20 dBi
Antenna Noise Temperature (linear)				
10° Elevation	56 K	49 K	52 K	42 K
20° Elevation	49 K	38 K	46 K	32 K
30° Elevation	47 K	35 K	45 K	28 K
40° Elevation	46 K	34 K	44 K	27 K
Antenna Noise Temperature (circular)				
10° Elevation	30 K		29 K	
20° Elevation	23 K		22 K	
30° Elevation	21 K		20 K	
40° Elevation	20 K		19 K	
Cross-Pol Isolation (Linear)	>30 dB (on axis)		>30 dB (on axis)	
Sidelobe Envelope, 100λ/D ≤ θ ≤ 20° 7° < θ ≤ 9.2° 9.2° < θ ≤ 48° 48° < θ	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
Tracking Accuracy	0.10°
Mast Pipe Size	3.5" SCH 40 Pipe (4.00" OD) 10.16 cm.
Shipping Specifications	445 lbs. (200 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
SATCOM Technologies