

2.4M C & Ku-Band Antennas Rx/Tx

Series 1244

Technical Specifications

Electrical		C-Band Linear	C-Band Circular	Ku-Band
Antenna Size		2.4 M (8 ft.)	2.4 M (8 ft.)	2.4 M (8 ft.)
Operating Frequency (GHz)	Receive Transmit	3.625 - 4.20 GHz 5.85 - 6.425 GHz	3.625 - 4.20 GHz 5.85 - 6.425 GHz	10.70 - 12.75 GHz 13.75 - 14.50 GHz
Midband Gain (+/- .2 dB)	Receive Transmit	38.20 dBi 42.20 dBi	38.00 dBi 42.00 dBi	47.40 dBi 49.20 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)	-3 dB -15 dB	Rx: 2.20° Tx: 1.40° Rx: 4.90° Tx: 3.10°	Rx: 2.20° Tx: 1.40° Rx: 4.90° Tx: 3.10°	Rx: 0.70° Tx: 0.60° Rx: 1.60° Tx: 1.40°
Sidelobe Envelope, Co-Pol (dBi)	100λ / D < θ ≤ 20° 20° < θ ≤ 26.3° 26.3° < θ ≤ 48° θ > 48°	29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)	29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)	29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)
Antenna Noise Temperature	5° Elevation 10° Elevation 20° Elevation 40° Elevation	55 K 47 K 43 K 43 K	61 K 53 K 49 K 49 K	56 K 51 K 48 K 41 K
Power Handling		1 kW	1 kW	100 W
Cross Polarization Isolation	On Axis Within 1.0 dB Beamwidth	> 30 dB > 27 dB	Rx > 15 dB Tx > 17.7 dB Rx > 15 dB Tx > 17.7 dB	Rx > 30 dB Tx > 35 dB Rx > 25 dB Tx > 26 dB
Output Waveguide Interface Flange		Rx: CPR 229 Tx: CPR 137 or Type N	Rx: CPR 229 Tx: CPR 137 or Type N	Rx: WR75 Tx: WR75

Mechanical			
Reflector Material	Glass Fiber Reinforced SMC		
Antenna Optics	Four-Piece, Prime Focus, Offset Feed		
Mast Pipe Size	6" SCH 40 Pipe (6.62" OD) 16.80 cm.		
Elevation Adjustment Range	5° to 90° Continuous Fine Adjustment		
Azimuth Adjustment Range	+/- 30° Fine Adjustment, 360° Continuous		
Mount Type	Elevation over Azimuth		
Shipping Specifications (Approximate Net Weight)	640 lbs	660 lbs	630 lbs.

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		

GENERAL DYNAMICS SATCOM Technologies

1500 Prodelin Drive • Newton, NC 28658 USA • Telephone: +1-828-464-4141 • Fax: +1-828-464-4147
Email: vsat@gdsatcom.com • Web Site: www.gdsatcom.com

1000-057 Rev. 04/12

© 2012 General Dynamics. All rights reserved. General Dynamics reserves the right to make changes in its products and specifications at anytime and without notice. All trademarks indicated as such herein are trademarks of General Dynamics. All other product and service names are the property of their respective owners. © Reg. U.S. Pat. and Tm. Off.



Planet Communications Asia PLC.

157 Soi Ramindra 34, Ramindra Rd., Tarang, Bangkok, Bangkok 10230
Tel: +66 2 792 2400 | Fax: +66 2 792 2499, +66 2 943 5771 | E-mail: sales@planetcomm.com



PlanetComm: