

## Series 1182 --- Rx/Tx 1.8M C & Ku- Band Antennas With Fine Adjustment



#### **KEY FEATURES:**

- Precision compression molded offset reflector
- •Non-penetrating roof mount and king posts available
- •Interface kits for all C & Ku-Band RF heads in stock
- •Reflector/Feed electrical anti-icing available
- •Insat extended C-band available



Back View 1.8M Rx/Tx



Option
Ku-Band Feed

General Dynamics SATCOM Technologies is the world's largest manufacturer of Rx/Tx VSAT antennas. We have the broadest product line in the industry including Receive Only Rx/Tx and Rural Telephony antenna systems. General Dynamics SATCOM Technologies offers nineteen antenna sizes, 47cm to 4.5M. General Dynamics SATCOM Technologies is the leader in obtaining type certifications and approvals for Intelsat, AsiaSat and Eutelsat. General Dynamics SATCOM Technologies' antennas provide the best quality in the market due to the sophisticated, precision SMC compression molding process technology.

General Dynamics SATCOM Technologies provides the best value antenna solution to the market with competitive prices, the highest quality products and superb engineering support.

General Dynamics SATCOM Technologies is ISO registered, KEMA # 70022.01. General Dynamics SATCOM Technologies - The Market Leader in VSAT Antennas.

GENERAL DYNAMICS
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# Series 1182 – Rx/Tx 1.8M C & Ku-Band Antennas With Fine Adjustment

	C-Band Linear	C-Band Circular	Ku-Band
Electrical Performance			
Antenna Size	1.8M (71 in.)	1.8M (71 in.)	1.8M (71 in.)
Frequency (GHz)	Rx 3.625 – 4.2 GHz	3.625 – 4.2 GHz	10.70 – 12.75 GHz
	Tx 5.850 - 6.425 GHz	5.850 - 6.425 GHz	13.75 – 14.5 GHz
Antenna Gain at Midband, dBi (± .2dB)	Rx 35.5 dBi	35.3 dBi	44.8 dBi
	Tx 39.5 dBi	39.3 dBi	46.8 dBi
VSWR	1.3:1 Max	1.3:1 Max	1.3:1 Max Tx 1.5:1 max Rx
Pattern Beamwidth (in degrees at midba	and)		
-3 dB	3.0° Rx 1.9° Tx	3.0° Rx 1.9° Tx	1.0° Rx 0.8° Tx
-15 dB	6.7° Rx 4.3° Tx	6.7º Rx 4.3º Tx	2.2º Rx 1.8º Tx
Sidelobe Performance 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°	+8 dBi	+8 dBi	+8 dBi
26.3° < θ ≤ 48°	32 – 25 Log θ dBi	32 – 25 Log θ dBi	32 – 25 Log θ dBi
48°<θ	-10 dBi (averaged)	-10 dBi (averaged)	-10 dBi (averaged)
Antenna Noise Temperature	AFI	4517	001/
10° Elevation	45K	45K	69K
20° Elevation	41K 41K	41K	64K
30° Elevation 40° Elevation	41K 40K	41K 40K	63K 62K
Power Handling	1 kW	1 kW	100 W
Cross Polarization Isolation	1 1744	1 1744	100 **
On Axis	30 dB	17.3 dB Tx 15.5 dB Rx	30 dB
Within 1.0 dB Beamwidth	26 dB	17.3 dB Tx 15.5 dB Rx	26 dB
Output Waveguide Interface Flange	WR137 or N Tx	WR137 or N Tx	WR75
Calput Waveguide internace Flange	WR229 Rx	WR229 Rx	WR229 Rx
RF Specification			
Mechanical Performance			
Reflector Material	Glass Fiber Reinforced SMC		
Antenna Optics	Prime Focus, One-Piece, Offset Feed		
Mast Pipe Size	3.5" SCH 40 Pipe (4.0" OD) 10.16 cm.		
Elevation Adjustment Range	10° to 80° Continuous Fine Adjustment		
Azimuth Adjustment Range	+/- 10° Fine Adjustment, 360° Continuous		
Mount Type	Elevation over Azimuth		
Shipping Specifications	Liovation over 7th		
Approximate Net Weight	185 lbs.	190 lbs	175 lbs.
Environmental Performance	100 100.	100 100	170 100.
Wind Loading			
Operational	45 MPH (72 km/h)		
Survival	125 MPH (201 km/h)		
Temperature Range (operational)	-40° to 140° F (-40° to 60° C)		
Rain (operational)	1/2" (13mm) / hr		
Ice (operational)			
	Salt Pollutante and Contaminante as F	nocuntared in Casatal and In	dustrial Aroas
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**

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1500 Prodelin Drive • Newton, North Carolina 28658 USA • Telephone: +1-828-464-4141 • Fax: +1-828-466-0860 E-mail: prodelin@gdsatcom.com • Web Site: www.gdsatcom.com