



1.8M

C & KU-BAND

RX/TX

SERIES

1183

Prodelin Corporation 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. Prodelin offers nineteen antenna sizes, 47cm to 4.5M. Prodelin is the leader in obtaining type certifications and approvals for Intelsat, AsiaSat and Eutelsat. Prodelin antennas provide the best quality in the market due to the sophisticated, precision SMC compression molding process technology. Prodelin provides the best value antenna solution to the market with competitive prices, the highest quality products and superb engineering support. Prodelin is ISO registered, KEMA # 70022.01. *Prodelin - The Market Leader in VSAT Antennas.*



Back View
1.8M Rx/Tx



Option
Ku-Band Feed

Key Features

- Precision compression molded offset reflector
- Non penetrating roof mounts 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



Receive/Transmit

Series 1183

	Electrical	C-Band			
		Linear	Circular	Ku-Band	
1.8M	Antenna Size	1.8M (71 in.)	1.8M (71 in.)	1.8M (71 in.)	
	Operating Frequency	Receive	3.625 - 4.2 GHz	3.625 - 4.2 GHz	10.95 - 12.75 GHz
		Transmit	5.850 - 6.425 GHz	5.850 - 6.425 GHz	14.0 - 14.5 GHz
	Midband Gain (\pm .2dB)	Receive	35.5 dBi	35.5 dBi	45.0 dBi
		Transmit	39.5 dBi	39.5 dBi	46.5 dBi
	C & KU-BAND	Antenna Noise Temperature			
		10° elevation	56 K	30 K	44 K
		20° elevation	49 K	23 K	38 K
		30° elevation	47 K	21 K	35 K
	RX/TX	40° elevation	46 K	20 K	33 K
Sidelobe Envelope, Co-Pol					
Mainbeam $< \theta < 7^\circ$		29-25 Log θ dBi	29-25 Log θ dBi	29-25 Log θ dBi	
$7^\circ < \theta < 9.2^\circ$		+8 dBi	+8 dBi	+8 dBi	
SERIES	$9.2^\circ < \theta < 48^\circ$	32 -25 Log θ dBi	32 -25 Log θ dBi	32 -25 Log θ dBi	
	$48^\circ < \theta < 180^\circ$	-10 dBi (averaged)	-10 dBi (averaged)	-10 dBi (averaged)	
	Cross-Polarization (Linear)	>30 dB on axis	N/A	>30 dB on axis	
	Axial Ratio (Circular)				
1183	Receive	N/A	2.28	N/A	
		N/A	1.60	N/A	
	Transmit	1.3:1 Max.	1.3:1 Max.	1.3:1 Max.	
VSWR					
Feed Interface	Receive	CPR 229 F	CPR 229 F	Available in a variety of designs	
	Transmit	CPR 137 or Type N	CPR 137 or Type N	Available in a variety of designs	

Mechanical

Reflector Material	Glass Fiber Reinforced Polyester SMC	
Antenna Optics	Prime Focus, One-Piece Offset Feed	
Mast Pipe Size	3.5" SCH 40 Pipe (4.00" OD) 10.16 cm.	
Elevation Adjustment Range	5° to 90°, Continuous Fine Adjustment	
Azimuth Adjustment Range	360° Continuous	
Mount Type	Elevation over Azimuth	
Shipping Specifications	175 lbs.	160lbs.

Environmental Performance

Wind Loading	Operational	45 mph (72 km/h)
	Survival	125 mph (201 km/h)
Temperature	Operational	-40° to 140° F (-40° to 60° C)
	Survival	-50° to 160° F (-46° to 71° C)
Rain	Operational	1/2" /hr
	Survival	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/ft ²	