

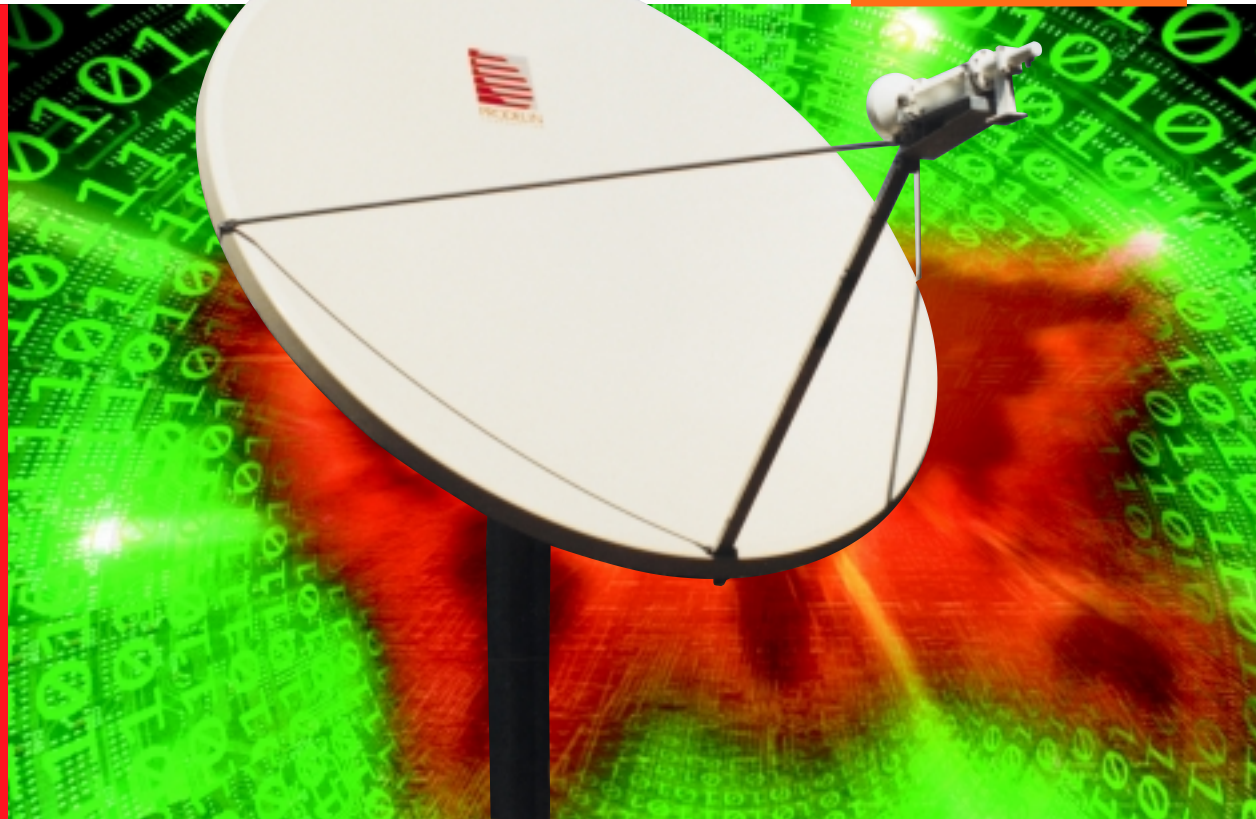
2.4M

C & KU-BAND

RX/TX

SERIES

1251



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
2.4M Rx/Tx



Option
Ku-Band Feed

Key Features

- Two piece compression molded offset reflector
- C-Band Intelsat approved # IA022A00
- Installation time reduced with improved mount design
- Ships easily in standard air freight containers
- Non penetrating roof mounts and king post available
- Interface kits for all C & Ku-Band RF heads in stock
- Insat extended C-Band available
- Two axis tracking configuration available
- Reflector/Feed electrical anti-icing available

Receive/Transmit

Series 1251

2.4M

C & KU-BAND

RX/TX

SERIES

1251

Electrical		C-Band		
		Linear	Circular	Ku-Band
Antenna Size		2.4 M (96 in.)	2.4 M (96 in.)	2.4 M (96 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	13.75 - 14.5 GHz
Midband Gain ($\pm .2$ dB)	Receive	38.0 dBi	38.0 dBi	47.6 dBi
	Transmit	42.0 dBi	42.0 dBi	49.2 dBi
Antenna Noise Temperature				
10° elevation		52 K	30 K	42 K
20° elevation		46 K	23 K	32 K
30° elevation		45 K	20 K	28 K
40° elevation		44 K	19 K	27 K
Sidelobe Envelope, Co-Pol (dBi)				
$100\lambda / D \theta \leq 20^\circ$		29-25 Log θ dBi	29-25 Log θ dBi	29-25 Log θ dBi
$20^\circ < \theta \leq 26.3^\circ$		- 3.5 dBi	- 3.5 dBi	- 3.5 dBi
$26.3^\circ < \theta \leq 48^\circ$		32 -25 Log θ dBi	32 -25 Log θ dBi	32 -25 Log θ dBi
$\theta > 48^\circ$		-10 dBi (averaged)	-10 dBi (averaged)	-10 dBi (averaged)
Cross-Pol Isolation (Linear)		>30 dB on axis	N/A	>30 dB on axis
Axial Ratio (Circular)	Receive	N/A	2.28	N/A
	Transmit	N/A	1.94	N/A
VSWR		1.3:1 Max.	1.3:1 Max.	1.3:1 Max.
Feed Interface	Receive	CPR 229 F	CPR 229 F	WR 75
	Transmit	CPR 137 or Type N	CPR 137 or Type N	WR 75 or Direct Radio Mounting
Mechanical				
Reflector Material		Glass Fiber Reinforced Polyester SMC		
Antenna Optics		Prime Focus, Offset Feed, Two-Piece Divided Along Major Axis		
Mast Pipe Size		6" SCH 40 Pipe (6.63" OD) 16.83 cm.		
Elevation Adjustment Range		5° to 90°, Continuous Fine Adjustment		
Azimuth Adjustment Range		$\pm 45^\circ$ Fine Adjustment, 360° Continuous		
Mount Type		Elevation over Azimuth		
Shipping Specifications		385 lbs. (174 kg.)		
Environmental Performance				
Wind Loading	Operational	50 mph (80 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		

