

1.8 Meter Prodelin Tx Rx Antenna (Series 1183)



**P180KU
P180CL
P180CC**

VIKING
SATCOM

Your Trusted Source for Satellite Equipment

- Available with Ku, C and INSAT C band Feed Options
- Precision Compression Molded Reflector
- NPRM or Pedestal Mounts Available

Electrical		C-Band Linear	C-Band Circular	Ku-Band
Antenna Size		1.8 M (71 in.)	1.8 M (71 in.)	1.8 M (71 in.)
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	10.95 - 12.75 GHz 14.00 - 14.50 GHz
Midband Gain (+/- .2dB)	Receive Transmit	35.50 dBi 39.50 dBi	35.50 dBi 39.50 dBi	45.00 dBi 46.50 dBi
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
40° Elevation		46 K	20 K	33 K
Sidelobe Envelope, Co-Pol				
Mainbeam < θ < 7°		29 - 25 Log θ dBi	29 - 25 Log θ dBi	29 - 25 Log θ dBi
7° < θ < 9.2°		+8 dBi	+8 dBi	+8 dBi
9.2° < θ < 48°		32 - 25 Log θ dBi	32 - 25 Log θ dBi	32 - 25 Log θ dBi
48° < θ < 180°		-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)	Receive Transmit	N/A N/A	2.28 1.60	N/A N/A
VSWR		1.3:1 Max.	1.3:1 Max.	1.3:1 Max.
Feed Interface	Receive Transmit	CPR 229 F CPR 137 or Type N	CPR 229 F 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
Mount Type	Elevation over Azimuth
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
Shipping Specifications	C-Band: 175 lbs Ku-Band: 160 lbs

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

TX-RX_P180KU-CL-CC_PR-1183_REV002
Specifications are subject to change without notice

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