

Antenna Technologies



Overview

The CPI Antenna Technologies' 1.8 meter antenna delivers exceptional performance for receive only applications for C and Ku-Band frequencies. specializes in providing a wide range of high quality, cost-effective Very Small Aperture Terminal (VSAT) products including fixed terminals, transportable and commercial grade antennas, and customizable specialty products.

Available in axisymmetric designs, VSAT antennas come in two different feeds and sizes to fit your application. The axisymmetric design is commercial quality RxO antenna available in C and Ku-Bands.

The electrical performance is compliant with FCC and ITU-RS-580 sidelobe specifications and Intelsat (A, B, C) and Eutelsat requirements.

FEATURES:

- Available in offset axisymmetric designs
- Designed for 3.6 to 12.75 GHz operation, meeting FCC and ITU-RS-580 requirements
- Galvanized steel elevation-over-azimuth pedestal with jackscrews
- Survives 125 mph winds in any position
- Quickly re-establish communications in the wake of a disaster

OPTIONS:

- C and Ku-Band feeds
- C and Ku receive only feed systems
- CPR manual or remote switchable feeds
- Antenna control system with tracking
- Reflector and feed deicing systems
- Environmental hub configurations
- Integrated transmit cross axis kits
- Integrated LNA or LNB systems
- HPAs, converters and M&C systems
- Packing for sea and air transport
- Turnkey installation and testing

UPGRADES:

- X-Band low PIM reflector/feed
- Continuous bullgear azimuth travel
- High wind configuration
- Low operating temperatures
- High power configurations

BENEFITS:

- High antenna efficiency
- Excellent rejection of noise and microwave interference

APPLICATIONS:

- Communications, Data Transfer, Broadcast

1.8 Meter C or Ku-Band Receive Only

Series 1183

Specifications

ELECTRICAL ⁽¹⁾		C-Band Receive Only	Ku-Band Receive Only
Antenna Size		1.8M (71 in.)	
Operating Frequency (GHz)		3.625-4.200	10.70 - 12.75
Midband Gain (± .5dB)		35.5 dBi	44.5 dBi
3 dB Beamwidth		2.9°	0.9°
Antenna Noise Temperature			
20° Elevation		49 K	38 K
30° Elevation		47 K	35 K
Polarization		Linear or Circular	Single or Dual Linear
First Sidelobe (typical)		- 20 dB	- 20 dB
Cross Polarization Isolation (Linear)		>30 dB (on axis)	>30 dB (on axis)
VSWR		1.3:1 Max	1.3:1 Max
Feed Interface		CPR 229 F	Rectangular WR 75 or WC 75
MECHANICAL ⁽¹⁾			
Reflector Material		Glass fiber reinforced polyester 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		5° to 90°, continuous fine adjustment	
Azimuth Adjustment Range		360° continuous	
Shipping Specifications		160 lbs. (72 kg.)	
ENVIRONMENTAL ⁽¹⁾			
Wind Loading	Operational Survival	45 mi./h (72 km/h) 125 mi./h (201 km/h)	
Temperature	Operational Survival	-40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)	
Atmospheric Conditions		Salt, pollutants and contaminants as encountered in coastal and industrial areas	
Solar Radiation		360 BTU/h/ft ² (1,000 Kcal/h/m ²)	

⁽¹⁾ Some specifications may vary based on the combination of equipment, options and/or upgrades ordered.

Contact us at CustomerCareSAT@cpii.com or call us at +1 770-689-2040

The data should be used for basic information only.
Formal, controlled specifications may be obtained from CPI for use in equipment design.



**Antenna
Technologies**
1700 NE Cable Drive
Conover, NC
USA 28613

+1 770-689-2040

1 888-874-7646
(In North America)

1 619-240-8480
(Outside North America)

CustomerCareSAT@cpii.com
www.cpii.com

For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design. © 2023 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.

©2023 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.