



Overview

CPI's X-Band VSAT Antenna Series 1385 is ideally suited for demanding commercial applications. The four (4) piece compression molded reflector is precision manufactured for high-efficiency C, X, or Ku-Band operation. The Az/EI mount is designed for installation on 10.75" OD Pedestals, using the supplied pipe flange. The 4-piece reflector construction allows for the ease of handling and increased shipping efficiency.

The Series 1385 Antenna is available with a variety of feed options. The Tier-3 Feed Support is ideal for mid to heavy weight RF electronics packages. For even heavier RF equipment, a Feed Stabilizer is optional for 1385 Series.

Features:

- Four Piece Transmit Quality SMC Reflector
- Fine Azimuth & Elevation Adjustments
- 2 Port X Band CP Feed
- Durable & Rugged Construction for Ease of Shipping & Handling

Options:

- Feed Stabilizer for Heavy RF packages up to 100 lb (45 kg.)

3.8 Meter X-Band RxTx Antenna

Series 1385

Electrical		X-Band Circular
Antenna Aperture		3.8m (150 in)
Operating Frequency (GHz)	Receive Transmit	7.25-7.75 GHz 7.90-8.40 GHz
Antenna Gain, Midband (± 0.3 dB)	Receive Transmit	47.6 dBi 48.2 dBi
Antenna Noise Temperature	10° Elevation 20° Elevation 30° Elevation	60° K 53° K 47° K
Sidelobe Envelope, Co-Pol (dBi)		
100 λ / D < θ \leq 20°		29 – 25 Log θ dBi
20° < θ \leq 26.3°		-3.5 dBi
26.3° < θ \leq 48°		32 – 25 Log θ dBi
48° < θ < 180°		-10 dBi (Typical)
3 dB Beamwidth	Receive Transmit	0.74° 0.68°
Polarization		Circular
Cross-Pol Isolation		Rx > 30 dB (AR 0.5 dB Max) Tx > 30 dB (AR 0.5 dB Max)
VSWR	Receive Transmit	1.2:1 Max 1.2:1 Max
Feed Interface	Receive Transmit	WR112 Flat WR 112 Flat

Mechanical	
Reflector Material	Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Fed, 4-piece (.6 F/D)
Mount Type	Elevation over Azimuth
Elevation Adjustment Range	12° to 90° Continuous Fine Adjustment (0° to 45°)
Azimuth Adjustment Range	360° Continuous, \pm 35° Fine Adjustment
Mast Pipe Interface	10 in Sch 40 Pipe, 273 mm (10.75 in) OD (special flange)
Max RF Electronics Weight	Tier 3 = 30 lb. (100 lb. w/ optional Feed Stabilizer)

Environmental		
Wind Loading	Operational Survival	50 mph (80 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)		½ in/hr
Ice (Survival)		½ in Radial
Atmospheric Conditions		Salt, Pollutants, and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation		360 BTU/h/ft ²

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



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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. © 2021 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.

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