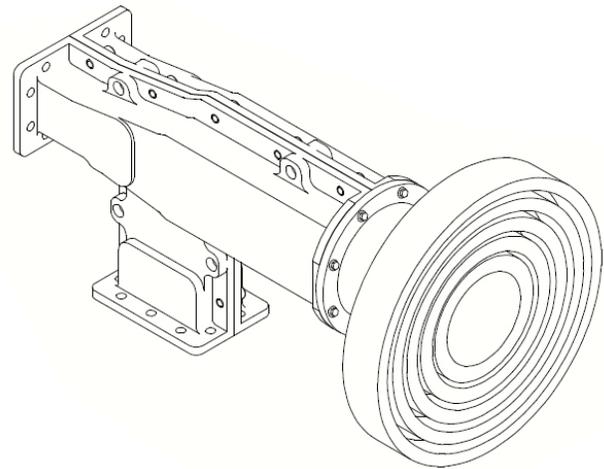
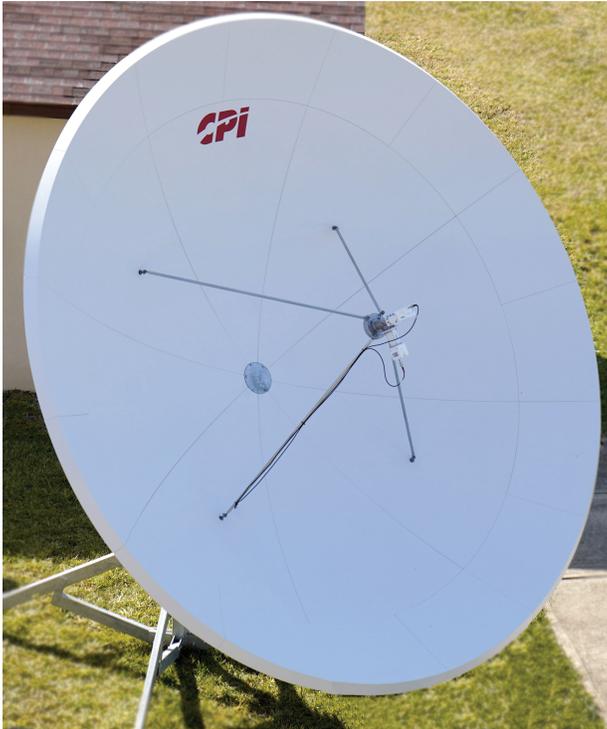


4.5 Meter Antenna C-Band RxO Antenna Series 1451 with Wideband Linear RxO Feed

Satcom & Antenna Technologies Division



Overview

The CPI Satcom & Antenna Technologies Inc. (CPI SAT) 4.5m C-Band RxO Antenna Series 1451 is ideally suited for demanding commercial applications. The 8-piece compression molded reflector is precision manufactured for high-efficiency operation. The Az/EI mount is designed for installation on a custom Kingpost (included) of 10" Schedule Pipe (10.75" or 273 mm OD) The Az/EI mount features fine Azimuth and elevation adjustments. All structural components are constructed from heavy gauge galvanized steel for strength and corrosion resistance.

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

FEATURES:

- Precision SMC reflector
- Fine azimuth & elevation adjustments
- Wideband Linear RxO feed model 0800-3953
- Durable and rugged construction for ease of shipping and handling
- Heavy gauge-galvanized steel Az/EI mount

OPTIONS:

- Top plate weldment (in lieu of Kingpost)

APPLICATIONS:

- Commercial RxO

4.5 Meter Antenna C-Band RxO Antenna Series 1451 with Wideband Linear RxO Feed

Specifications

ELECTRICAL ⁽¹⁾		Series 1451 Linear, C-Band
Antenna Aperture Size		4.5m (180 in)
Operating Frequency (GHz)		3.40 - 4.20 GHz
Antenna Gain, Midband (+/- .5dBi)		41.8 dBi
Antenna Noise Temperature (K)		
10° Elevation		52° K
20° Elevation		50° K
30° Elevation		48° K
Antenna Sidelobe Envelope, Co-Pol (dBi)		Per ITU-R S.580
Antenna 3 dB Beamwidth		1.4°
Polarization		Linear, Orthogonal
Cross Polarization Isolation		
On Axis		> 35 dB
VSWR		1.4:1 Max.
Feed Interface		2 x CPR229F

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

4.5 Meter Antenna C-Band RxO Antenna Series 1451 with Wideband Linear RxO Feed

Specifications

MECHANICAL ⁽¹⁾		
Reflector Material		Glass fiber reinforced polyester SMC
Antenna Optics		Prime focus, axisymmetric 8-piece (.3 F/D)
Mount Type		Elevation over azimuth
Mast Pipe Size		10 in Sch 40 Pipe, 273 mm (10.75 in) OD (w/ custom flange)
Elevation Adjustment Range		5° to 90° continuous fine adjustment
Azimuth Adjustment Range		360° continuous, ± 11° fine adjustment
ENVIRONMENTAL ⁽¹⁾		
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	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

⁽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.



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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. © 2022 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.

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