5G Solutions

Satcom & Antenna Technologies Division

Overview

CPI SAT is offering a range of specially configured RxO terminals to accommodate the changes to C-Band satellite spectrum under the 5G initiative. The 2.4m, 3.7m and 4.5m terminals include 5G band-pass filters and PLL LNBs to satisfy these new requirements.

The FCC has allocated the lower 300 MHz of C-Band 3.7-4.2 GHz frequency spectrum to facilitate 5G technology. This essentially leaves the upper 200 MHz of frequency spectrum for the use of C-Band satellite technology.

CPI's C-Band terminal solutions are integrated with a special band-pass filter and high performance LNB to accommodate the 5G applications. CPI SAT also offers these antennas in a base configuration for customers who wish to provide their own filters and LNBs.

FEATURES:

- 3 sizes; 2.4m, 3.7m and 4.5m
- C-Band RxO Satellite Feed System
- Support for Linear, Single or Dual Polarity
- Band Pass Filter for FG Weighing <650 g (<1.43 lbs)
- Band Pass Filter Rejects Energy <4.0 GHz at 60dB
- PLL LNB +/- 5.15 KHz LO Stability & Low Phase Noise

BENEFITS:

- CPI's industry knowledge and innovation
- One-Stop-Shop procurement from CPI
- Fully engineered and integrated package
- Guaranteed Performance
- CPI's full support 24/7/365
- 5-year Comprehensive Warranty

APPLICATIONS:

- Satellite Broadcasters
- CATV Headends

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Specifications

ANTENNAS			
Model	**1252**	**1374**	**1451**
RF PERFORMANCE			
Aperture Size	2.4m	3.7m	4.5m
Operating Frequency		4.0 - 4.2 GHz	
Antenna Gain (Mid Band, +/- .3 dB)*	37.8 dBi	41.2 dBi	42.6 dBi
Antenna Noise Temp 10° Elevation 20° Elevation 30° Elevation	 37K 33K 30K	 35K 30K 27K	 32K 29K 25K
Cross-Pol Isolation (Typical)		> 30 dB (On Axis)	
VSWR		1.4:1 Max	
G/T (w/ supplied LNB and filter) 10° Elevation 20° Elevation 30° Elevation	 19.2 dB/K 19.6 dB/K 19.9 dB/K	 22.8 dB/K 23.3 dB/K 23.6 dB/K	 24.5 dB/K 24.8 dB/K 25.1 dB/K
MECHANICAL PERFORMANCE			
Reflector Material		Glass Fiber Reinforced Polyester SMC	
Reflector Optics	3 piece, .37 F/D	8 piece, .37 F/D	8 piece, .30 F/D
Mount Type		Elevation over Azimuth	
Elevation Adjustment Range	0° to 90° Continuous Fine Adjustment	10° to 70° Continuous Fine Adjustment	5° to 90° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous Coarse Adjustment	360° Continuous Fine Adjustment	360° Continuous +/- 11° Fine Adjustment
Mast Pipe Size	5" SCH Pipe (5.56" OD)	6" SCH Pipe (6.63" OD)	10" SCH Pipe (10.75" OD)
ENVIRONMENTAL PERFORMANCE			
Wind Loading - Operational	50 mile/hour	45 mile/hour	45 mile/hour
Wind Loading - Survival	125 mile/hour	125 mile/hour	125 mile/hour
Operating Temperature Range	-40° to 140° F	-40° to 140° F	-40° to 140° F
Operating Temperature Survival	-50° to 160° F	-50° to 160° F	-50° to 160° F

* Antenna Gain at Feed Flange

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.

Communications & Power Industries

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