CPI 150 W CW TWTA

Ka-Band

For EMC/EMI and other instrumentation applications. Provides a mininum of 100 watts of power at the flange, across the 26.5 to 40.0 GHz frequency range.

CPI 150 W Ka-band TWTA, model VZA2791J1.

Simple to Operate
User-friendly microprocessor-controlled logic with integrated RS422/485 serial, GPIB or Ethernet interface. Digital metering is standard.

Easy to Maintain
Modular design and built-in fault diagnostic capability via remote monitor and control.

Meets Global Requirements
Meets International Safety Standard EN-60215, Electromagnetic Compatibility 2014/30/EU and Harmonic Standard EN-61000-3-2 to satisfy worldwide requirements. CE Marked.

Worldwide Support
Backed by over 40 years of satellite communications experience, and CPI's worldwide 24-hour customer support network that includes more than 20 regional factory service centers.

OPTIONS:

- Outdoor operation (weatherized)
- Rack-mount configuration

Quality Management System - ISO 9001:2015

CE

Specification	CPI Model VZA2791J1, 150 W CW Ka-band TWTA
Electrical Specifications	
Frequency	26.5 to 40.0 GHz
Output Power (min) TWT CW Power Flange	 150 W (54.0 dBm) 100 W (50.0 dBm) min, 125 W (51.0 dBm) typ.
Bandwidth	13.5 GHz, instantaneous
Gain	50 dB min. at rated power output, 53 dB min. at small signal
Gain Stability	±0.25 dB/24 hour max. (at constant drive and temp.) ±1.0 dB over temperature range
Small Signal Gain Slope	±0.025 dB/MHz max.
Small Signal Gain Variation	±5.0 dB pk-pk typ. across full bandwidth, at 6 dB backoff
RF Level Adjust Range	0 to 20 dB typ.
Attenuator Step Size	0.1 dB typ.
Input VSWR	2:1 max.
Output VSWR	2:1 max.
Load VSWR	1.5:1 max; no degradation, infinite VSWR without damage
Phase Noise	IESS 308 continuous mask
Noise and Spurious	-50 dBc max.
AM/PM Conversion	2.5°/dB max. for a single carrier up to 6 dB below rated power
Primary Power	100-240 VAC ± 10% single phase, 47-63 Hz
Power Consumption	650 VA typ. at saturated RF output power; 750 VA max.
Power Factor	0.95 min.
Environmental Specifications	
Ambient Temperature	-40°C to +45°C operating
Relative Humidity	RF unit: 100% condensing
Altitude	10,000 ft. with standard adiabatic derating of 2°C/1000 ft, operating; 50,000 ft. non-operating
Shock and Vibration	20g pk estimated, as encountered in normal truck transportation
Mechanical Specifications	
Cooling	Forced air with integral blower
RF Input Connection	WR28F waveguide flange (WR34F optional)
RF Output Connection	WR34G waveguide flange (WR28F optional)
Remote Interface	RS422/485 serial and RS232 serial, or IEEE-488 GPIB, Ethernet optional
RF Output Monitor	2.9 mm SMA Female
Dimensions (W x H x D)	10.25 x 9.5 x 20 inches (261 x 242 x 508 mm)
Weight	55 lbs max. (25 kg) with no options
Heat and Acoustic	
Heat Dissipation	450 W typ.
Acoustic	65 dBA typ.

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