

## For EMC/EMI and other instrumentation applications.

Provides a minimum of 100 watts of power at the flange, across the 18.0 to 26.5 GHz frequency range.

### 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.



CPI 150 W K-band TWTA, model VZK2791J1.

### OPTIONS:

- Outdoor operation (weatherized)
- Rack-mount configuration

Quality Management  
System - ISO 9001:2015



Specification	CPI Model VZK2791J1, 150 W CW K-band TWTA
<b>Electrical Specifications</b>	
Frequency	18.0 to 26.5 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	8.5 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.
<b>Environmental Specifications</b>	
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
<b>Mechanical Specifications</b>	
Cooling	Forced air with integral blower
RF Input Connection	WR42F waveguide flange
RF Output Connection	WR42G waveguide flange
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	52 lbs max. (23.6 kg) with no options
<b>Heat and Acoustic</b>	
Heat Dissipation	450 W typ.
Acoustic	65 dBA typ.



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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.

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