For EMC/EMI and other instrumentation applications.

Provides a mininum 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 |
|------------------------------|---|
| Electrical Specifications | |
| 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. |
| Environmental Specifications | 0.73 (1)(1). |
| 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 | 209 pk estimated, as encountered in normal track transportation |
| 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 |
| Heat and Acoustic | |
| Heat Dissipation | 450 W typ. |
| Acoustic | 65 dBA typ. |
| <u> </u> | |



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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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