

For EMC/EMI and other instrumentation applications.

Provides 900 watts of power in the 1.0 to 2.5 GHz frequency band in a compact 19-inch rack-mount dual drawer configuration for wideband testing.

Efficient and Reliable

Employs CPI dual-depressed collector helix traveling wave tubes, increasing efficiency by a nominal 20% over conventional single collector TWTs, and a power supply designed with a minimum number of parts for maximum uptime.

Simple to Operate

Integrated microprocessor control lets the user adjust and monitor all operating parameters from one easy-to-read local or remote panel, using straightforward menu-driven commands. Includes a built-in interface and serial bus for operation from the station computer.

Meets Global Requirements

230 VAC operation. 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 900 W L-band TWTA System, Model VZL2780P2

OPTIONS:

- Mimic remote control panel
- External harmonic filters
- External output isolator
- Ethernet interface

Quality Management
System - ISO 9001:2015



Specification	CPI Model VZL2780P2, 900 W L-Band TWTA System
Output Frequency	1.0 to 2.5 GHz
Output Power (min.) TWT Flange	1000 W min. 900 W min.
Gain	60 dB min. at rated power output, 63 dB min. at small signal
RF Level Adjust Range	0 to 20 dB
Output Power Adjustability	±0.1 dB
Gain Stability	±0.25 dB/24 hour typ, at constant drive and temperature, after 30 minute warmup
Small Signal Gain Slope	0.02 dB/MHz max.
Small Signal Gain Variation	10 dB pk-pk typ. over the 1.5 GHz bandwidth (typ.)
Input VSWR	1.65:1 max.
Output VSWR	2.0:1 typ.
Load VSWR	2.0:1 for full spec. compliance; any value operation without damage
Residual AM	-45 dBc up to 4 kHz; -20 [1.25 + logF (kHz)] dBc; 4 kHz to 500 kHz (F in kHz); -80 dBc above 500 kHz
Harmonic Content	-6 dBc typical at 1 GHz
Primary Power	208/120 V ±10%, or 380-415/220-240 V ±10%, 47 to 63 Hz; 5 wires are: phase 1, 2 & 3, neutral and ground (wire 5 can be used if available)
Power Factor	0.90 min. at 50 Hz
Power Consumption	13.8 kVA typ, 15.0 kVA max.
Inrush Current	200% max.
Ambient Temperature	-10°C to +40°C operating, -20°C to +70°C non-operating
Relative Humidity	95% non-condensing
Altitude	Up to 10,000 ft. with standard adiabatic derating of 2°C/1000 ft. operating; 50,000 ft. non-operating
Shock and Vibration	As normally encountered in a protected engineering laboratory environment
Cooling	Forced Air with integral blower and power supply fan. Rear air intake and exhaust. Maximum allowable external pressure loss allowable: 0.25" water gauge
Connections	RF Input: Type N Female; RF output: Type 7/16 coaxial female; RF output monitors: Type N Female
M&C Interface	Serial RS232 or RS422/485 (Ethernet optional)
Dimensions, W x H x D	RF Drawers (each): 19 x 17.5 x 28 inches (483 x 445 x 711 mm); Power Supply: 19 x 8.75 x 24 inches (483 x 223 x 610 mm)
Weight	Qty (2) RF Drawers: 230 lbs (104 kg) nom; Qty (2) Power Supplies: 200 lbs (90 kg); Qty (2) Interconnect Cables: 20 lbs (9 kg)
Acoustic noise	72 dBA @ 1 meter from front panel



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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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