

# 1.0 or 2.0 kW Compact Pulse Amplifier for Test and Measurement Applications

1.0 to 2.5 GHz

## The VZL-3529J1

1000 or 2000 Watt  
TWT Compact  
Pulsed Amplifier



### Compact

Five rack-units tall (8.75 in/222 mm).

### Versatile

Wide band, automatic fault recycle, user-friendly microprocessor-controlled logic with integrated computer interface, digital metering, and quiet operation suitable for laboratory environments.

An integral solid state preamplifier and IEEE interface are included as standard features.

### Global Applications

230 VAC operation. Designed to meet International Safety Standard EN61010 and Electromagnetic Compatibility EMC 2004/108/EC.

### Easy to Maintain

Modular design and built-in fault diagnostic capability backed by CPI's worldwide 24-hour customer support network that includes sixteen regional factory service centers.

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1.0 to 2.5 GHz

2.0 kW Compact Pulsed Amplifier

## SPECIFICATIONS, VZL-3529J1

### Electrical

Frequency	1.0 to 2.5 GHz
Output Peak Power (min.)	
TWT	1200 or 2200 W
Flange	1000 or 2000 W
Gain	63 dB min. at rated power; 65 dB min. at small signal
Gain Adjustment Range	20 dB min.
Gain Stability	±0.25 dB/24hr max. (after 30 minute warmup and at constant drive and temp.)
Input VSWR	2.5:1 max; 1.0:1 max. with optional input isolator
Output VSWR	2.5:1 typ.
Load VSWR	1.5:1 max. for full spec. compliance; Any value for continuous operation (soft fail VSWR protection limits at 500 W peak)
Phase Noise	0.5°rms asynchronous ripple
Pulse Width	0.07 to 50 µs
PRF	50 kHz max, 100 kHz max. available as option
Duty Cycle	6% max.
Delay	300 ns typ., 400 ns max.
Droop	0.5 dB over 50 µs
NPO	-15 dBm/MHz Beam On; -110 dBm/MHz Beam Off
Primary Power	220 - 240 VAC ±10%, single phase 47- 63 Hz
Power Consumption	2.6 kVA typ. 3.0 kVA max.
Filament Voltage	Reduction of 10% in standby for extended TWT life (available as option)
Inrush Current	200% max.

### OPTIONS:

- Remote Control Panel
- Input Isolator (-1 dB Gain)
- 115 VAC External Step-up Transformer

### Environmental

Ambient Temperature	-10° to +40°C operating -40° to +70°C non-operating
Relative Humidity	95% non-condensing
Altitude	10,000 ft. with standard adiabatic derating of 2°C/1000 ft., operating; 40,000 ft., non-operating
Shock and Vibration	As normally encountered in a protected laboratory environment
Acoustic Noise	65 dBA @ 3 ft. from amplifier

### Mechanical

Cooling (TWT)	Forced air with integral blower Rear air intake & exhaust; 0.10" water max. external pressure loss allowable
RF Input Connection	Type N female
RF Output Connection	Type N female
RF Output Monitor	Type N female, -50 dB nominal
Dimensions (W x H x D)*	19 x 8.75 x 26 in. (483 x 223 x 661 mm)
Weight	120 lbs (55 kg) max.
Heat Dissipation	700 watts (TBD)
Safety	EN61010

\*Dimension exclude front handles, rear fans and exhaust ducts.



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For more detailed information, please refer to the corresponding CPI Technical Description.

**Note:** Specifications may change without notice as a result of additional data or product refinement.

Please contact CPI before using this information for system design.