

## 4.25 kW Compact Pulse Amplifier for Test and Measurement Applications

4.0 to 8.0 GHz

### The VZC-3530J1

4250 Watt TWT  
Compact Pulsed  
Amplifier



#### Compact

Eight rack-units tall (14 in/356 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 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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4.0 to 8.0 GHz

4.25 kW Compact Pulsed Amplifier

## SPECIFICATIONS, VZC-3530J1

### Electrical

Frequency	4.0 to 8.0 GHz
Output Peak Power (min.)	
TWT	4500 W
Flange	4250 W
Gain	65 dB min. at rated power (with no RF options); 67 dB min. at small signal (with no RF options); deduct one dB of gain from the above minimums for each RF option
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 typ; 1.5:1 typ. 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	400 ns typ.
Droop	0.5 dB over 50 µs
NPO	-10 dBm/MHz Beam On; -110 dBm/MHz Beam Off
Primary Power	220 - 240 VAC ±10%, single phase 47- 63 Hz
Power Consumption	2.2 kVA typ. 2.5 kVA max.
Filament Voltage	Reduction of 10% in standby for extended TWT life (available as option)
Inrush Current	200% max.

### 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

### 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	WRD-350 waveguide flange
Dimensions (W x H x D)*	19 x 14 x 27.5 in. (483 x 356 x 699 mm)
Weight	150 lbs (55 kg) max.
Heat Dissipation	2200 watts max.
Safety	EN61010
Acoustic Noise	65 dBA @ 3 ft. from amplifier

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

### OPTIONS:

- Remote Control Panel
- Input Isolator (-1 dB Gain)



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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.