

# Compact Medium Pulsed Amplifier for Test and Measurement Applications

8.0 to 18.0 GHz

## The VZM-3529J1

2000 Watt TWT  
Compact Medium  
Pulsed Amplifier.



### Compact

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

### Versatile

Ultra wide-band, automatic fault recycle, user friendly microprocessor-controlled logic with integrated computer interface, digital metering, electronic variable attenuation, soft fail when subjected to extreme load SWR conditions, quiet operation for a laboratory environment.

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

### Global Applications

230 VAC operation. Meets International Safety Standard EN61010 and Electromagnetic Compatibility 89/336/EEC.

### Easy to Maintain

Modular design and built-in fault diagnostic capability backed by CPI's worldwide 24-hour customer support network that includes 9 regional factory Service Centers.



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8.0 to 18.0 GHz

2000W Compact Medium Pulsed Amplifier

## OPTIONS:

- *Input Isolator (-1 dB gain)*
- *Remote Control Panel*
- *115 VAC External Step-Up Transformer*

## SPECIFICATIONS, VZM-3529J1

### Electrical

TWT Model Number	VTM5192A7
Frequency	8.0 to 18.0 GHz
Output Power	
TWT	2200W (min.)
Flange	2000W (min.)
Gain	63 dB min. at rated power output; 65 dB min. at small signal
RF Level Adjust	0 to 20 dB
Gain Stability	±0.25 dB/24hr max. (after 30 min. warmup and at constant drive and temperature)
Gain Variation	18 dB pk-to-pk, typical
Input VSWR	2.5:1 max. 2.0:1 max. (with optional input isolator)
Output VSWR	2.5:1 typical
Load VSWR	1.5:1 max. for full spec compliance VSWR Protection Limits 500 Watts
Pulse Width	0.50 degrees rms asynchronous ripple 0.07 to 50 microseconds 100 microseconds available (Optional)
PRF	50 KHz max. 100 KHz (Optional)
Droop	0.5 dB over 300 microseconds
NPO	-15 dBm/MHz (on) -110 dBm/MHz (off)
Duty Cycle	4.0% max.
Delay	300 nanoseconds (typical) 400 ns max.
Harmonic Content	-3 dBc typical at lower band edge decreasing to -15 dBc typical at upper band edge.
Primary Power	
Voltage	220-240 VAC ±10%, single phase
Frequency	47-63 Hz
Power Consumption	2.6 kVA typical 3.0 kVA max.
Inrush Current	200% max.
Filament Voltage	reduction of 10% in standby (Optional)

### Environmental (Operating)

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

### Mechanical

Cooling (TWT)	Forced air with integral blower Rear air intake & exhaust
RF Connectors	
Input	Type-N Female
Output	WRD-750 Wave Guide Flange
RF Output Monitor	Type-N Female, -50 dB nominal
Dimensions (W x H x D)	19 x 8.75 x 26 in (483 x 222 x 661 mm)
Weight	120 lbs/55 kg
Safety	EN61010
Heat Dissipation	700 Watts (TBD)



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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.