# 1.0 or 2.0 kW Compact Pulse Amplifier

for Test and Measurement Applications

**2.5 to 8.0 GHz**


**The VZS/C3529J1**

*1000 or 2000 Watt*
*TWT Compact*
*Medium Power*
*Pulsed Amplifier*

## Compact

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

## Versatile

Ultra-wideband, 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, 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 Inteernational 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 fifteen regional factory service centers.

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2.5 to 8.0 GHz

Compact Medium Power Pulsed Amplifier

# 2.5 to 8.0 GHz

## SPECIFICATIONS, VZS/C-3529J1

### Electrical

| | |
|---|---|
| Frequency | 2.5 to 8.0 GHz |
| Output Peak Power (min.) | |
| TWT | select 1200 or 2200 W |
| Flange | select 1000 or 2000 W |
| Gain | 63 dB min. at rated power output;<br>65 dB min. at small signal |
| RF Level Adjust | 0 to 20 dB |
| Gain Stability | ±0.25 dB/24hr max. (after 30 minute warmup and at constant drive and temp.) |
| Input VSWR | 2.5:1 max;<br>2.0:1 max. with optional input isolator |
| Output VSWR | 2.5:1 typ. |
| Load VSWR | 1.5:1 max. for full spec. compliance;<br>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 |
| Harmonic Content | -3 dBc typ. at lower band edge, decreasing to -15 dBc typ. at upper band edge |
| NPO | -15 dBm/MHz Beam On;<br>-110 dBm/MHz Beam Off |
| Primary Power | 220 - 240 VAC ±10%, single phase<br>47- 63 Hz |
| Power Consumption | 2.6 kVA typ.<br>3.0 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<br>-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;<br>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<br>Rear air intake & exhaust;<br>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.<br>(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.*

### OPTIONS:

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

ISO 9001 Certificate Number: 30515

NASDAQ GLOBAL SELECT

**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.*

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