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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OPTIONS:

• Input Isolator (-1 dB Gain)

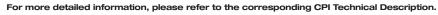
• Remote Control Panel

SPECIFICATIONS VZC-3530.11

| Electrical Electrical | 8, VZC-3530J1 | Environmental | |
|-------------------------------------|--|---|--|
| Frequency | 4.0 to 8.0 GHz | Ambient Temperature | -10° to +40°C operating -40° to +70°C non-operating |
| Output Peak Power (min.) TWT Flange | 4500 W 4250 W | Relative Humidity | 95% non-condensing |
| 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 | 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 |
| Gain Adjustment Range | 20 dB min. | Mechanical | , |
| Gain Stability | ± 0.25 dB/24hr max. (after 30 minute warmup and at constant drive and temp.) | Cooling (TWT) | Forced air with integral blower Rear air intake & exhaust: |
| Input VSWR | 2.5:1 typ; 1.5:1 typ. with optional input isolator | | 0.10" water max. external pressure loss allowable |
| Output VSWR | 2.5:1 typ. | RF Input Connection | Type N female |
| Load VSWR | 1.5:1 max. for full spec. compliance; Any value for continuous operation (soft fail VSWR protection limits at 500 W peak) | RF Output Connection | WRD-350 waveguide flange |
| | | Dimensions (WxHxD)* | 19 x 14 x 27.5 in. (483 x 356 x 699 mm) |
| Phase Noise | 0.5°rms asynchronous ripple | Weight | 150 lbs (55 kg) max. |
| Pulse Width | 0.07 to 50 μs | Heat Dissipation | 2200 watts max. |
| PRF | 50 kHz max, 100 kHz max. available as option | Safety | EN61010 |
| Duty Cycle | 6% max. | Acoustic Noise | 65 dBA @ 3 ft. from amplifier |
| Delay | 400 ns typ. | | |
| Droop | 0.5 dB over 50 μs | *Dimensions exclude front handles, rear fans and exhaust ducts. | |
| NPO | -10 dBm/MHz Beam On; -110 dBm/MHz Beam Off | | |







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.

Primary Power

Power Consumption

Filament Voltage

Inrush Current



220 - 240 VAC ±10%, single phase 47-63 Hz

TWT life (available as option)

Reduction of 10% in standby for extended

2.2 kVA typ. 2.5 kVA max.

200% max.



