

## CPI Beverly Microwave Division 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.

### Worldwide Support

Backed by CPI's worldwide 24-hour customer support network that includes more than 20 regional factory service centers.

#### FEATURES:

- Rack mountable
- Waveguide output
- GPIB remote

#### BENEFITS:

- Compact high pulsed power
- Single phase AC power
- Local or remote control
- Wide RF bandwidth

#### APPLICATIONS:

- Test and measurement systems

# X-Band 5.0 kW TWT Compact Pulsed Amplifier: VZX3530J1

## Specifications

Frequency Range	8.0 to 12.0 GHz
Output Power (min.), Flange	5000 W
Gain	67dB min. at rated power (with no RF options); >67 dB min. at small signal (with no RF options);
Gain Adjustment Range	20 dB min.
Input VSWR	2.5:1 typical
Output VSWR	2.5:1 typical
Load VSWR	1.5:1 max. for full spec. compliance; May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.
Pulse Width	0.1 $\mu$ s to 50 $\mu$ s
PRF	50 kHz max.
Duty Cycle	6% max.
Delay	400 ns typ.
Droop	0.5 dB over 50 $\mu$ s
NPO	-10 dBm/MHz Beam On; -110 dBm/MHz Beam Off
Primary Power	220 - 240 VAC $\pm$ 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
Inrush Current	200% max.
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
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	WR-90 waveguide flange
Dimensions (W x H x D)	19 x 14 x 26 in. (483 x 356 x 661 mm), excluding connectors, fans, handles and exhaust duct
Weight	150 lbs (68 kg) max
Heat Dissipation	$\approx$ 1500 W
Safety	EN61010
Acoustic Noise	65 dBA @ 3 ft. from amplifier