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# S-Band 4.0 kW TWT Compact Pulsed Amplifier

## VZS3530J1

### Features:

- Rack mount
- · Coaxial output
- GPIB remote
- · Compact high pulsed power
- Single phase AC power
- Local or remote control
- Wide RF bandwidth

## **Benefits:**

- Versatile
- Suitable for lab environments
- Designed for the global market
- Modular design and built-in fault diagnostics for easy maintenance
- Wide RF bandwidth reduces number of required amplifiers

#### Compact

Five rack-units tall (8.75 in/222 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 preamplifi er and IEEE interface are included as standard features.



Applications:

Test and measurement systems

#### **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 more than 50 years of high power experience, CPI's worldwide 24-hour customer support network includes more than 20 regional factory service centers.

Solid State Power Amplifiers • Integrated Microwave Assemblies
 Receiver Protectors • Control Components • Transmitters • Amplifiers
 Modulators • Magnetrons • Crossed Field Amplifiers
 • Ring Loop Traveling Wave Tubes • Power Couplers





# 4.0 kW S-Band Compact Pulsed Amplifier - VZS3530J1

Specifications	
Frequency	2.0 to 4.0 GHz
Output Power (min.), Flange	4000 W (in the majority of the frequency band)
Gain	66 dB min. at rated power (with no RF options); >66 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 μs to 100 μs
PRF	50 kHz max.
Duty Cycle	6% max
Delay	300 ns typ, 400 ns max.
Droop	0.5 dB over 50 µs
NPO	-10 dBm/MHz Beam On; 110 dBm/MHz Beam Off
Primary Power	220 - 240 VAC, single phase 47- 63 Hz
Power Consumption	2.0 kVA typical
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	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	Type N female
RF Output Monitor	Type N female, -46 dB nominal
Dimensions (W x H x D)	19 x 8.72 x 26 in. (483 x 221 x 661 mm) excluding connectors, fans, handles and exhaust duct
Weight	150 lbs (68 kg) max
Heat Dissipation	≈1500 W
Safety	EN61010
Acoustic Noise	65 dBA @ 3 ft. from amplifier

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design. For information on this and other CPI products visit our webpage at www.cpii.com/BMD, or contact: CPI Beverly Microwave Division, +1 (978) 922-6000 • FAX: +1 (978) 922-8914 • BMDmarketing@cpii.com