

4.25 kW Compact Pulse Amplifier

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 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 twenty regional factory service centers.

Worldwide Support

Backed by over 35 years of satellite communications experience, and CPI's worldwide 24-hour customer support network that includes more than 20 regional factory service centers.



Model VZS-3530J1

4250 Watt TWT Compact Pulsed Amplifier for **Test and Measurement Applications**

OPTIONS

- Remote Control Panel
- Input Isolator (-1 dB Gain)



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4.25 kW S-Band Compact Pulsed Amplifier

Specification	Model VZS-3530J1
Frequency	2.0 to 4.0 GHz
Output Power (min.), TWT Output Power (min.), Flange	4500 W 4250 W
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
Gain Adjustment Range	20 dB min.
Gain Stability	±0.25 dB/24hr max. (after 30 minute warmup and at constant drive and temp.)
Input VSWR	2.5:1 typ; 1.5:1 typ. with optional input isolator
Output VSWR	2.5:1 typ
Load VSWR	1.5:1 max. for full spec. compliance; Peak output pulse power foldback protection at peak reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.
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
NPO	-10 dBm/MHz Beam On; 110 dBm/MHz Beam Off
Primary Power	220 - 240 VAC ±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	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 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	2200 watts max.
Safety	EN61010
Acoustic Noise	65 dBA @ 3 ft. from amplifier