4.25 kW Compact Pulse Amplifier
for Test and Measurement Applications

2.0 to 4.0 GHz

The VZS-3530J1

4250 Watt TWT Compact Pulsed Amplifier

Compact
Eight rack-units tall (14.0 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 twenty regional factory service centers.

satcom division

Communications & Power Industries Canada, Inc.
45 River Drive
Georgetown, Ontario CANADA L7G2J4

tel: +1 (905) 877-0161
fax: +1 (905) 877-5327

e-mail: marketing@cmp.cpii.com
www.cpii.com/satcom

2.0 to 4.0 GHz

4.25 kW Compact Pulsed Amplifier

2.0 to 4.0 GHz

OPTIONS:

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

SPECIFICATIONS, VZS-3530J1

Electrical

Frequency	2.0 to 4.0 GHz
Output Peak Power (min.)	
TWT	4500 W
Flange	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	400 ns typ.
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 (available as option)
Inrush Current	200% max.

Environmental

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

Mechanical

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	Type N female
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

This product is subject to the U.S. International Traffic in Arms Regulations (ITAR). Sale of this product is subject to US Government approval. In accordance with part 126.1 of the ITAR, it is the policy of the United States to deny licenses and other approvals for the sales, exports/ imports, and or transfer of items subject to the ITAR destined for or originating in certain countries in which the U.S. maintains an arms embargo.

CE

ISO 9001 Certificate Number: 30515

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.

MKT 252, ISSUE 8 DEC 13 PDF

Communications & Power Industries

satcom division