

2000 Watt TWT Compact Pulsed 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 EMC 2004/108/EC.

Easy to Maintain

Modular design and built-in fault diagnostic capability.

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 VZL-3529J1

2.0 kW Compact Pulse Amplifier
for Test and Measurement Applications

OPTIONS

- Remote Control Panel
- Input Isolator (-1 dB Gain)
- 115 VAC External Step-Up Transformer



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2000 Watt TWT Compact Pulsed Amplifier

Specification	Model VZL-3529J1
Frequency	1.0 to 2.5 GHz
Output Power (min.), TWT Output Power (min.), Flange	2200 W 2000 W
Gain	63 dB min. at rated power; 65 dB min. at small signal
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 max; 1.0:1 max. with optional input isolator
Output VSWR	2.5:1 typ.
Load VSWR	1.5:1 max. for full spec. compliance; Any value for continuous operation (soft fail VSWR protection limits at 500 W peak)
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	-15 dBm/MHz Beam On; -110 dBm/MHz Beam Off
Primary Power	220 - 240 VAC ±10%, single phase 47- 63 Hz
Power Consumption	2.6 kVA typ. 3.0 kVA max
Filament Voltage	Reduction of 10% in standby for extended TWT life (available as option)
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
Acoustic Noise	65 dBA @ 3 ft. from amplifier
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
RF Output Monitor	Type N female, -50 dB nominal
Dimensions (W x H x D)*	19 x 8.75 x 26 in. (483 x 223 x 661 mm)
Weight	120 lbs (55 kg) max.
Heat Dissipation	700 watts (TBD)
Safety	EN61010