

Compact Medium Power Amplifier for EMI/EMC Test and Measurement Applications

4.0 - 10.0 GHz

The VZS/X-2776L1 Series

100 W TWT Amplifier



4.0 - 10.0 GHz

100 W Travelling Wave Tube Amplifier

Compact

Three rack units tall (5.25 in, 133 mm)

Versatile

Ultra-wideband, automatic fault recycle, user-friendly microprocessor-controlled logic with integrated computer interface, VSWR soft-fail protection, digital metering, quiet operation for laboratory environment.

An integral solid state pre-amplifier and IEEE interface are included as standard features.

Efficient

Utilizes dual-depressed collector helix traveling wave tube for maximum 1.5 kVA operation.

Global Applications

230 VAC operation. Meets International Safety Standard EN61010 and Electromagnetic Compatibility 2004/108/EC.

Worldwide Support

Modular design and built-in fault diagnostic capability, backed by CPI's worldwide 24-hour customer support network that includes sixteen regional factory service centers.

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OPTIONS :

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

SPECIFICATIONS, VZS/X-2776L1

Electrical

Frequency	4.0 to 10.0 GHz
Output Power	
TWT	100 W min.
Flange	70 W min.
Gain (with no options)	44 dB min. at rated power output; 40 dB typ. at small signal
RF Level Adjust	0 to 20 dB continuous
Gain Stability	±0.25 dB/24 hr max. (at constant drive and temp.)
Gain Variation	12.0 dB pk-pk max., typ.
Input VSWR	2.5:1 typ. 1.5:1 max. (with optional input isolator)
Output VSWR	2.5:1 typ.
Load VSWR	1.5:1 max. for full spec compliance; 2.0:1 max. continuous operation; any value without damage
Residual AM	-50 dBc below 10 kHz; -20 [1.3 + log F (kHz)] dBc, 10 kHz to 500 kHz; -80 dBc above 500 kHz
Phase Noise	Meets IESS-308/309 with 3 dB margin
Noise Figure	15 dB max.
Harmonic Content	-3 dBc typical at lower band edge, decreasing to -15 dBc typ. at upper band edge
Primary Power	220-240 VAC ±10%, single phase, 47-63 Hz
Power Consumption	1.4 kVA typ. 1.5 kVA max.
Inrush Current	200% max.

Environmental (Operating)

Ambient Temperature	-10° to +40°C operating
Relative Humidity	95% non-condensing
Altitude	Up to 10,000 ft (3000 m) with standard adiabatic derating of 2°/1000 ft.
Shock and Vibration	Designed to meet conditions normally encountered in the laboratory
Acoustic Noise	65 dBA @ 3 ft. from amplifier

Mechanical

Cooling (TWT)	Forced air with integral blower. Rear air intake and exhaust.
RF Input Connection	Type N female
RF Output Connection	Type N female
RF Output Monitor	Type-N female, -57 dB nom.
Dimensions (W x H x D)	19 x 5.25 x 24 in. (483 x 133 x 610 mm)
Weight	70 lbs (32 kg)
Safety	EN61010



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.



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