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 Traveling Wave Tube Amplifier

Compact

Four rack units tall (7.0 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 twenty regional factory service centers.

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4.0 - 10.0 GHz

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 7 x 24 in. (483 x 178 x 610 mm)
Weight	70 lbs (32 kg)
Safety	EN61010

OPTIONS:

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

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

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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