

250 W and 320 W TWT Amplifiers

RF Output Power From 7.5 to 18.0 GHz

4RU TWTA provides minimum of 225 W at the flange.

Versatile

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

Efficient

Utilized 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 2014/30/EU.

Worldwide Support

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



Model VZM-6993J5

250 watt and 320 W M-band TWTA for EMC/EMI Test Applications

OPTIONS

- Input isolator (-1 dB gain)
- Remote control panel
- 115 VAC external step-up transformer
- TTL Pulsing



250 W and 320 W M-Band TWTAs

Specification	Model VZM-6993J5
Frequency	Select: 7.5 to 18.0 GHz or 8.0 to 18.0 GHz
Output Power (min.), TWT	250 W or 320 W CW
Output Power (min.), Flange	225 W or 250 W CW
Bandwidth	10.0 GHz
Gain	53.5 dB min. at rated power output; 53.5 dB typ. at small signal
RF Level Adjust Range	0 to 20 dB continuous
Gain Stability	±0.25 dB/24 hr max. (after 30 minute warmup and at constant drive and temperature)
Gain Variation	12 dB pk-pk typ. over 10.0 GHz bandwidth
VSWR	2.5:1 typ, 1.5:1 max. with optional input isolator
Input	2.5:1 max.
Output	1.5:1 max. full spec compliance; 2.0:1 max. continuous operation; any value without damage
Load	
Residual AM	-50 dBc below 10 kHz; -20[1.3 + log F (kHz)] dBc, 10 kHz to 500 kHz; -85 dBc above 500 kHz
Phase Noise	Meets IESS 308/309 with 3 dB margin
Noise and Spurious	-50 dBc typ. excluding harmonics
Harmonic Content	-3 dBc typ. at lower band edge, decreasing to -15 dBc typ. at upper band edge
Prime Power	220 to 240 VAC single phase ±10%, 2 wire, 47 to 63 Hz
Power Consumption	1.4 kVA typ, 1.5 kVA max.
Inrush Current	200%
Operating Temperature	-10°C to +40°C (-40°C to +70°C non-operating)
Relative Humidity	95% non-condensing
Operating Altitude	10,000 ft above sea level (3,048 m), with standard adiabatic de-rating of 2° per 1,000 feet; 40,000 ft non-operating
Shock and Vibration	Designed to meet conditions normally encountered in the laboratory
Acoustic Noise	65 dBA max. at three feet from amplifier
Cooling	Forced air with integral blower. Rear air intake and exhaust.
Input RF Connector	Type N Female
Output RF Connector	WRD-750
RF Power Monitors	Type N Female
Dimensions	19" W x 7" H x 24.0" L (483 x 178 x 610 mm)
Weight	75 lbs (34.1 kg) max.
Safety	Meets EN61010

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Quality Management
System - ISO 9001:2008

For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. 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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