

250W or 320W TWT Amplifier for Test and Measurement Applications

8.0 to 18.0 GHz

The VZM-6993J5

250 or 320 Watt
TWT Compact
Power Amplifier



Compact

Provides 250 or 320 watts of power in a 4 rack unit package.

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

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

Global Applications

230 VAC operation. Designed to meet International Safety Standard EN61010 and Electromagnetic Compatibility 89/336/EEC.

Easy to Maintain

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

satcom  **division**

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8.0 to 18.0 GHz

250W or 320W TWT Amplifier

SPECIFICATIONS, VZM-6993J5

Electrical

TWT Model Number	VTM6292M4 (250 W) or optional VTM6392M4B (320 W)
Frequency	8.0 to 18.0 GHz
Output Power (min.)	
TWT	250 W (320 W with optional TWT)
Flange	225 W (290 W with optional TWT)
Gain	53.5 dB min. at rated power output; 55.5 dB min. at small signal
RF Level Adjust Range	0 to 20 dB
Gain Stability	±0.25 dB/24hr max. (after 30 minute warmup and at constant drive and temp.)
Gain Variation	12 dB pk-pk typ.;
Input VSWR	2.5:1 typ; 1.5:1 max. with optional input isolator
Output VSWR	2.5:1 max.
Load VSWR	1.5:1 max. for full spec. compliance; 2.0:1 max. continuous operation
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 typical excluding harmonics
Harmonic Content	-3 dBc typical at lower band edge, decreasing to -15 dBc typical 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

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 engineering laboratory environment
Acoustic Noise	65 dBA @ 3 ft. from amplifier

Mechanical

Cooling (TWT)	Forced air with integral blower Rear air intake & exhaust
RF Input Connection	Type N female
RF Output Connection	WRD-750
RF Output Monitor	Type N female
Dimensions (W x H x D)*	19 x 7 x 24 in. (483 x 178 x 610 mm)
Weight	75 lbs (34.1 kg) max.
Safety	Meets EN61010

*Dimension exclude front handles, rear fans and exhaust ducts.

OPTIONS:

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



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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.