CPI 250/320 W TouchPower™ TWTAs

M-Band

For EMC/EMI and other instrumentation applications.

Provides a mininum of 250 watts of power in a 4-rack unit package, across the 7.5 to 18.0 GHz frequency range.

CPI 250/320 W M-band TWTA, Model VZM6993J5

Touchscreen Graphical Interface

State of the art touchscreen interface with both amplifier and/or system level control capabilities. Includes fault logs, parameter trending and scopescreen for monitoring performance. Internal switch control eliminates need for external controllers.

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 1.5 kVA maximum operation.

Meets Global Requirements

Meets International Safety Standard EN-60215, Electromagnetic Compatibility 2014/30/EU and Harmonic Standard EN-61000-3-2 to satisfy worldwide requirements. CE Marked.

Worldwide Support

Backed by over 40 years of satellite communications experience, and CPI's worldwide 24-hour customer support network that includes more than 20 regional factory service centers.

OPTIONS:

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

Quality Management System - ISO 9001:2015

CE

CPI Communications & Power Industries

Specification	CPI Model VZM6993J5 250/320 W TouchPower TWTA	
Frequency	Select: 7.5 to 18 GHz or 8.0 to 18.0 GHz	
Output Power (min.), TWT	320 W CW	250 W CW
Output Power (min.), Flange	250 W CW	225 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 over 6.0 GHz bandwidth, typ.	
VSWR Input Output Load	 2.5:1 typ, 1.5:1 max. (with optional input isolator) 2.5:1 typ. 1.5:1 max. 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; -85 dBc above 500 kHz	
Phase Noise	Meets IESS 308/309	
Noise and Spurious	-50 dBc typ. excluding harmonics	
Harmonic Content	-3 dBc typ. at lower band edge	
Prime Power	220 to 240 VAC single phase ±10%, 47 to 63 Hz	
Radiated Immunity	10 V/m (for higher immunity levels, contact CPI)	
Power Consumption	1.4 kVA typ, 1.5 kVA max.	
Inrush Current	200%	
Ambient Temperature	-10°C to +40°C operating; -54°C to +71°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 one meter from front panel	
Cooling	Forced air with integral blower. Rear air intake and exhaust	
Input RF Connector	Type N Female	
Output RF Connector	Type WRD750 double ridged waveguide	
RF Power Monitors	Type N Female, -50 dB nominal	
M&C Interface	GPIB, RJ45 Ethernet, includes embedded GUI control (RS422/485, RS232 serial interface optional)	
USB Port	Download/Upload software, logs	
Dimensions	19" W x 7.0" H x 24.0" L (483 x 222 x 661 mm)	
Weight	110 lbs (50 kg) nom.	
Safety	EN-60215	

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