

For EMC/EMI and other instrumentation applications.

Provides a minimum of 250 watts of power in a 5 rack unit package, across the 8.0 to 18.0 GHz frequency range.

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.

Easy to Maintain

Modular design and built-in fault-diagnostic capability with convenient and clearly visible indicators for easy maintainability in the field. A USB port is available for uploading new firmware and system configurations and downloading logs and system configurations for cloning to other units.

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

CPI satcom amplifiers are backed by over 40 years of satellite communications experience, and CPI's global customer support network, including regional factory service centers located worldwide.



CPI 250/320 W M-band TouchPower TWTA,
Model TzM6993J1

OPTIONS:

- Input isolator (-1 dB gain)
- Remote control panel
- 115 VAC external step-up transformer
- LifeExtender/LifePredictor technology to extend TWT life

Quality Management
System - ISO 9001:2015



Specification	CPI Model TZM6993J1, 250/320 W M-Band TouchPower TWTA	
Output Frequency	8.0 to 18.0 GHz	
Output Power (min.) TWT Flange	320 W CW 250 W CW	290 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 typical, 1.5:1 max. (with option input isolator) 2.5:1 typical 1.5:1 max. full spec. compliance; 2.0:1 max. continuous operation; any value operation 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 IES 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	2.6 kVA typ, 3.0 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	
Altitude	10,000 ft. above sea level (3,048 m), with standard adiabatic de-rating of 2°C/1000 ft. operating; 40,000 ft. non-operating	
Shock and Vibration	Designed to meet conditions normally encountered in the laboratory	
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, -50 dB nominal (Rear panel option, type SMA Female)	
M&C Interface	RJ45 Ethernet, includes embedded GUI control (RS422/485, RS232 serial interface, GPIB optional)	
USB Port	Download/Upload software, logs	
Dimensions, W x H x D	19" x 8.75" x 26.0" (483 x 222 x 661 mm)	
Weight	110 lbs (50 kg) nom.	
Safety	EN-60215	



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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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