

**K-Band**

# 250 W CW TWT Power Amplifier

## Compact

Only 5 RU tall (8.75", 222 mm)

## Versatile

Ultra-wideband, automatic fault recycle, user friendly microprocessor-controlled logic with integrated computer interface, digital metering, electronic variable attenuation, soft-fail when subjected to extreme load SWR conditions, quiet operation for laboratory environment. An integral solid state pre-amplifier and IEEE interface are included as standard features.

## Global Applications

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

## Worldwide Support

Backed by more than four decades of satellite communications experience, and CPI's worldwide 24-hour customer support network which includes over twenty regional factory service centers.



### Model VZK2792J1

250 W CW power amplifier  
for EMI/EMC testing applications

#### OPTIONS

- Input isolator (-1 dB gain)
- Remote control panel
- 115 VAC external step-up transformer
- 18.0 to 21.7 GHz, 240 W minimum at the flange



## 250 W CW TWT Power Amplifier

Specification	Model VZK2792J1
<b>Electrical Specifications</b>	
Frequency	18.0 to 22. GHz
Output Power (min) TWT CW Power Flange	250 W (54.0 dBm) min. 210 W (53.2 dBm) min.
Bandwidth	4.0 GHz
Gain	52.2 dB min. at rated power output 54.2 dB typ. at small signal
Gain Stability	±0.25 dB/24 hour max. (at constant drive and temp.); ±1.0 dB over temperature range
Small Signal Gain Variation	10.0 dB pk-pk typ. across full bandwidth
RF Level Adjust Range	0 to 20 dB continuous, typ.
Attenuator Step Size	0.1 dB typ.
Input VSWR	2.5:1 max; 1.8:1 max. with optional input isolator
Output VSWR	1.6:1 typ.
Load VSWR	1.5:1 max; no degradation, 2.0:1 max. continuous operation; any value for operation without damage
Noise and Spurious	-60 dBc/4 kHz typ.
Harmonic Content	-20 dBc
Primary Power	220-240 VAC ± 10% single phase, 47-63 Hz
Power Consumption	2.6 kVA typ. at saturated RF output power; 3.0 kVA max.
Inrush Current	200% max.
<b>Environmental Specifications</b>	
Ambient Temperature	-10°C to +40°C operating
Relative Humidity	95% non-condensing
Altitude	10,000 ft. with standard adiabatic derating of 2°C/1000 ft, operating; 50,000 ft. non-operating
Shock and Vibration	Designed to meet conditions normally encountered in the laboratory
Acoustic Noise	65 dBA at 3 ft. from amplifier
<b>Mechanical Specifications</b>	
Cooling	Forced air with integral blower, rear air intake and exhaust
RF Input Connection	2.9 mm connector
RF Output Connection	WR42 waveguide
Remote Interface	RS422/485 and RS232 serial, Ethernet interface optional, GPIB
RF Power Monitor	2.9 mm female
Dimensions (W x H x D)	19 x 8.75 x 26.0 in. (483 x 222 x 661 mm)
Weight	110 lbs (50 kg) with no options

Distributed by: Reliant EMC LLC, 3311 Lewis Ave, Signal Hill CA 90755, 408-916-5750, [www.reliantemc.com](http://www.reliantemc.com)



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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