#### 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



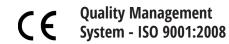
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Specifications

# 250 W CW TWT Power Amplifier

Specification	Model VZK2792J1
Electrical Specifications	
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	$\pm 0.25$ dB/24 hour max. (at constant drive and temp.); $\pm 1.0$ 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.
Environmental Specifications	
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
Mechanical Specifications	
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





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.

MKT 289, ISSUE 6 AUG 2018