

# 250 W Rack-Mount TWTA

## Compact

Five rack units tall (8.75 in/222mm).

## Versatile

Ultra wide-band, 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 a laboratory environment.

## Global Applications

230 VAC operation. Meets International Safety Standard EN-60215 and Electromagnetic Compatibility 2014/30/EU standards to satisfy world requirements.

## Easy to Maintain

Modular design and built-in fault diagnostic capability backed by CPI's worldwide 24-hour customer support network that includes more than 20 regional factory service centers.



## Model VZL-6943J2

1.0 to 2.5 GHz, 250 watt L-band rack-mount TWTA for **test and measurement applications**

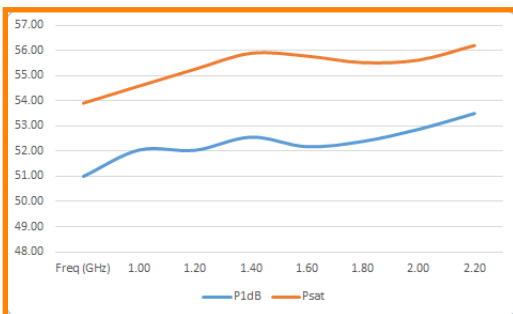
### OPTIONS

- Input isolator
- Remote control panel
- 115 VAC external step-up transformer



## 250 W Rack Mount TWTA

Specification	Model VZL-6943J2
Output Frequency	1.0 to 2.5 GHz
Output Power (min.) TWT Flange	250 W min. (300 W typ) 225 W min. (275 W typ), see graph on page 1
Gain	54 dB at rated power output, 56 dB min. at small signal
RF Level Adjust Range	0 to 20 dB
Gain Stability	±0.25 dB/24 hour max, at constant drive and temperature, after 30 minute warmup
Gain Variation	18 dB pk-pk typical
Input VSWR	2.5:1 max (2.0:1 max. with optional input isolator)
Output VSWR	2.5:1 typ.
Load VSWR	2.0:1 continuous operation; 1.5:1 for full spec. compliance; any value operation without damage
Residual AM	-50 dBc below 10 kHz; -20 [1.3 + logF (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	-60 dBW/4 kHz
Noise Figure	15 dB max.
Harmonic Content	-3 dBc typical at lower band edge, decreasing to -15 dBc typical at upper band edge
Primary Power	Voltage: Single phase, 220-240 VAC ±10%; Frequency: 47-63 Hz, 15 A max.
Power Consumption	2.6 kVA typical, 3.0 kVA max.
Inrush Current	200% max.
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	As normal encountered in a protected engineering laboratory environment
Cooling	Forced Air with integral blower. Rear air intake and exhaust. Maximum external pressure loss allowable: 0.5" water column
Connections	RF Input: Type N Female; RF output: Type N Female; RF output monitor: Type N Female, -50 dB nom.
M&C Interface	Serial RS232 or RS422/485
Dimensions, W x H x D	19 x 8.75 x 26 inches (483 x 222 x 661 mm)
Weight	110 lbs (50 kg) nom.
Safety	EN61010
Acoustic noise	65 dBA @ 3 feet from amplifier



VZL-6943J2 typical Psat and P1dB output power, dBm

Distributed by: Reliant EMC LLC, 3311 Lewis Ave, Signal Hill CA 90755, 408-916-5750, 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.

MKT 397, ISSUE 2 dated AUG 2018