

## Compact Medium Power Amplifier for Test and Measurement Applications

**2.0 to 8.0 GHz**

### The VZS/C-6963J2

250 Watt TWT,  
Compact Medium  
Power Amplifier.



#### Compact

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

#### 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.

An integral solid state preamplifier and IEEE interface are included as standard features.

#### Global Application

230 VAC operation. Meets International Safety Standard EN61010 and Electromagnetic Compatibility 89/336/EEC.

#### Easy to Maintain

Modular design and built-in fault diagnostic capability backed by CPI's worldwide 24-hour customer support network that includes 9 regional factory Service Centers.



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2.0 to 8.0 GHz  
250W Compact Medium Power Amplifier

## OPTIONS:

- *Input Isolator (-1 dB gain)*
- *Remote Control Panel*
- *115 VAC External step-up transformer*

## SPECIFICATIONS, VZS/C-6963J2

### Electrical

TWT Model Number	0102275500
Frequency	2.0 to 8.0 GHz
Output Power	
TWT	250W min. (typical 300W)
Flange	225W min. (typical 275W)
Gain	54 dB min. at rated power output; 56 dB min. at small signal
RF Level Adjust	0 to 20 dB
Gain Stability	±0.25 dB/24hr. max. (after 30 min. warmup and at constant drive and temperature)
Gain Variation	12 dB pk-to-pk, typical
Input VSWR	2.5:1 typical 1.7:1 max. (with optional input isolator)
Output VSWR	2.5:1 typical
Load VSWR	1.5:1 max. for full spec compliance; 2.0:1 max. continuous operation; any value for 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 IESS 308/309 with 3 dB margin
Noise and Spurious	-50 dBc typical excluding harmonics
Noise Figure	15 dB max.
Harmonic Content	-3 dBc typical at lower band edge
Primary Power	
Voltage	220-240 VAC ±10%, single phase
Frequency	47-63 Hz
Power Consumption	2.6 kVA typical 3.0 kVA max.
Inrush Current	200% max.

### Environmental (Operating)

Ambient Temperature	-10° to +40°C operating
Relative Humidity	95% non-condensing
Altitude	10,000 ft. with standard adiabatic derating of 2°C/1000 ft., operating
Shock and Vibration	As normally encountered in a protected engineering laboratory environment
Acoustic Noise	65 dBA @ 3 ft. from amplifier

### Mechanical

Cooling (TWT)	Forced air with integral blower. Rear air intake & exhaust.
RF Connectors	
Input	Type-N female
Output	Type-N female
RF Output Monitor	Type-N female, -50 dB nominal
Dimensions, (W x H x D)	19 x 8.75 x 26 in (483 x 222 x 661 mm)
Weight	110 lbs/50kg
Safety	EN61010



**KEEPING YOU ON THE AIR**  
*not up in the air*



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For more detailed information, please refer to the corresponding CPI Technical Description.

**Note:** Specifications may change without notice as a result of additional data or product refinement.

Please contact CPI before using this information for system design.