# 250 W and 320 W TWT Amplifiers

### RF Output Power From 2.0 to 8.0 GHz

5RU TWTA provides minimum of 225 W at the flange.

#### **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**

230 VAC operation. Meets International Safety Standard EN61010 and Electromagnetic Compatibility 2014/30/EU.

## **Worldwide Support**

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



Model VZS/C-6963J2
250 watt and 320 W S/C-band TWTA
for EMC/EMI Test Applications

#### **OPTIONS**

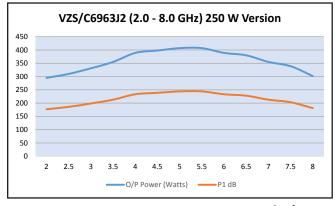
- Input isolator (-1 dB gain)
- Remote control panel
- 115 VAC external step-up transformer

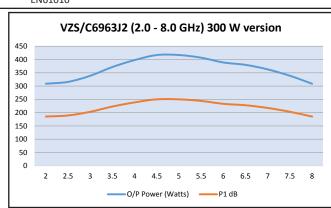


#### S/C-Band Specifications

#### 250 W and 320 W S/C-Band TWTAs

Specification	Model VZS/C-6963J2	
Frequency	2.0 to 8.0 GHz	
Output Power (min.), TWT	320 W CW	250 W CW
Output Power (min.), Flange	224 W from 2.0 to 2.5 GHz, 290 W from 2.5 to 7.5 GHz, 275 W from 7.5 to 8.0 GHz	225 W CW
Bandwidth	6.0 GHz	
Gain	54 dB min. at rated power output; 56 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 typ, 1.7:1 max. (with optional input isolator) 2.5:1 typ. 1.5:1 max. full spec compliance; 2.0:1 max. continuous operation; any value 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 typ. excluding harmonics	
Harmonic Content	-3 dBc typ. at lower band edge	
Prime Power	220 to 240 VAC single phase ±10%, 2 wire, 47 to 63 Hz	
Power Consumption	2.6 kVA typ, 3.0 kVA max.	
Inrush Current	200%	
Ambient Temperature	-10°C to +40°C (derate by 1.9°C per 1,000 ft. above sea level); -40°C to +70°C non-operating	
Relative Humidity	95% non-condensing	
Operating Altitude	10,000 ft above sea level (3,048 m), with standard adiabatic de-rating of 2° per 1,000 feet; 40,000 ft non-operating	
Shock and Vibration	Designed to meet conditions normally encountered in the laboratory	
Acoustic Noise	65 dBA max. at three feet from amplifier	
Cooling	Forced air with integral blower. Rear air intake and exhaust	
Input RF Connector	Type N Female	
Output RF Connector	Type N Female	
RF Power Monitors	Type N Female, -50 dB nominal	
Dimensions	19" H x 8.75" W x 26.0" L (483 x 222 x 661 mm)	
Weight	110 lbs (50 kg) nom.	
Safety	EN61010	





Typical output power by frequency

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