## **150W CW TWT Power Amplifier**

for EMI/EMC Testing & Communications

#### The VZA-2790J1 Series

150 watt CW
Ka-band TWT
Power Amplifier—
Environmentally sealed
compact design for
outdoor operation



#### **Efficient and Cost Effective**

Mounting at the antenna improves performance through minimized cable losses and saves cost in system design. Employs a high efficiency helix traveling wave tube, reducing operating costs.

#### Simple to Operate

User-friendly microprocessor-controlled logic with integrated RS422/485 computer interface. Digital metering is standard.

#### **Easy to Maintain**

Modular design and built-in fault diagnostic capability via remote monitor and control.

#### **Global Applications**

Meets International Safety Standard EN-60215, Electromagnetic Compatibility 2004/108/EC and Harmonic Standard EN-61000-3-2 to satisfy worldwide requirements.

#### **Worldwide Support**

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



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### **Ka-Band**

OPTIONS:
• Ethernet Interface

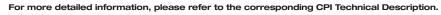
• Outdoor Operation

# **SPECIFICATIONS, Ka-band TWTA**

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Electrical		
Model Number	VZA-2790J1	
Frequency	26.5 - 40.0 GHz	
Output Power		
TWT	150 W	
Flange	100 W, min., 125 W typ.	
Bandwidth	13.5 GHz	
RF Level Adjust Range	0 to 20 dB	
Attenuator Step Size	0.1 dB typ.	
Gain		
at rated power	50 dB min.	
at small signal	53 dB min.	
Small Signal Gain Variation	±5.0 dB pk-pk across the full bandwidth	
Gain Stability (at constant	±0.25 dB/24 hours max. (after 30 minute warm-up)	
drive and temperature)	±1.0 dB over temperature range	
VSWR		
Input	2:1	
Output	2:1	
Load	1.5:1 max.; no degradation, infinite VSWR without damage	
Phase Noise	IESS 308 continuous mask	
AM/PM Conversion	2.5°/dB max. for a single carrier up to 6 dB below rated power (1.0°/dB up to 3 dB 0B0 with linearizer)	
Noise and Spurious	-50 dBc	
Noise Figure	10 dB typ.	
Primary Power	Single phase, 100-240 VAC $\pm$ 10%, 47-63 Hz	
Power Consumption	650 VA typ, at saturated RF output power; 750 VA max.	
Power Factor	0.95 min.	
Environmental (operating)		
Ambient Temperature	-40°C to +45°C	
Relative Humidity	100% condensing with outdoor option, 95% non-condensing standard	
Altitude	10,000 ft with standard adiabatic derating of 2°C/1000 ft	
Shock and Vibration	20 g peak estimated, truck transportation	
Mechanical		
Cooling	Forced air with integral blower	
RF Input Connection	WR-28F (WR-34 optional)	
RF Output Connection	WR-34G (WR-28 optional)	
RF Output Monitor	2.9 mm SMA Female	
Dimensions (WxHxD)	10.25 x 9.5 x 20 inches (261 x 242 x 508 mm)	
Weight	52 lbs (23.6 kg) max.	
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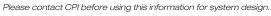
Quality Management System - ISO 9001:2008



 ${\it Note: Specifications may change without notice as a result of additional data or product refinement.}$ 

**Heat and Acoustic** Heat Dissipation

Acoustic





450 W typ.

65 dBA typ.

