

Compact High Power Amplifier for Test and Measurement Applications

8.0 to 10.0 GHz

The VZX-6993J4

500 Watt TWT
Compact High
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 Applications

230 VAC operation. Meets International Safety Standard EN60215 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.

PRELIMINARY



INSTRUMENTATION
AMPLIFIERS

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8.0 to 10.0 GHz
500W Compact High Power Amplifier

8.0 to 10.0 GHz

SPECIFICATIONS, VZX-6993J4

Electrical

TWT Model Number	VTC636103A*
Frequency	8.0 to 10.0 GHz
Output Power	
TWT	600W min.
Flange	500W min.
Gain	58 dB min. at rated power output;
RF Level Adjust	0 to 20 dB typical
Gain Stability	±0.25 dB/24hr max. (after 30 min. warmup and at constant drive and temperature)
Gain Variation	TBD
Input VSWR	2.5:1 typical 2.0:1 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
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	10 dB typical
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	WR-113
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/50 kg
Safety	EN60215

OPTIONS:

- *Input Isolator (-1 dB gain)*
- *Remote Control Panel*
- *115 VAC External Step-Up Transformer*

PRELIMINARY



KEEPING YOU ON THE AIR
not up in the air

CPI
wireless solutions

INSTRUMENTATION
AMPLIFIERS

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.