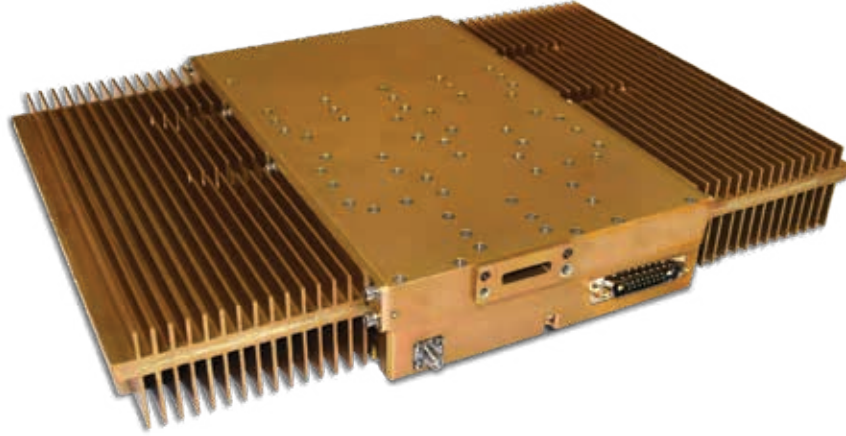


Communications & Power Industries RF Power Amplifier



CPI's VSX3696 is a 1.8 kW X-band solid state power amplifier optimized for pulse radars.

X-band Solid State Power transmitters are efficient, high power, and compact with proven GaN transistor technology.

CPI's VSX3696 Solid State Power amplifier is rugged, reliable, and easy to maintain. The VSX3696 Solid State Power Transmitter is designed for use in radar applications and covers the 8.5 – 10.0 GHz frequency band.

Optimized for Pulsed Radars

This amplifier utilizes GaN transistors to provide high gain, high efficiency and excellent pulse fidelity. The result is excellent AM/PM, phase-noise and spectral regrowth performance.

FEATURES:

- Frequency band: 8.5 – 10.0 GHz
- High efficiency GaN transistors
- BIT and controls
- 1800 W pulsed module @ 10% duty

BENEFITS:

- Can be power combined
- Long life
- High efficiency
- Excellent pulse fidelity
- Low AM/PM
- Low phase noise

APPLICATIONS:

- Pulsed radars
- Airborne radars
- TWTA replacements

CPI X-Band GaN Solid State Power Amplifier: VSX3696

Specifications

Frequency Range	9.0 to 10.0 GHz
Saturated Peak RF Output	1800 MW
Typical Pulse Width	1 to 100 μ sec
Maximum Pulse Droop	0.6 dB
Maximum Duty Cycle	10%
Output Power Flatness	Dependent on operating bandwidth
Nominal Small Signal Gain	58 dB
Maximum Input VSWR	1.5:1
Maximum Output VSWR	1.5:1
Maximum Harmonic Output	-35 dBc
Maximum Interpulse Thermal Noise	-100 dBc/MHz
Noise Power Density	-90 dBc into a 100 MHz bandwidth

NTIA Compliance

With appropriately shaped input pulse

Specifications

Prime Power	50 VDC
Ambient Temperature	-30C to +50C operating
Relative Humidity	90% non-condensing
Shock and Vibration	Ruggedized for harsh environments
Cooling	Forced air
RF Input Connection	SMA female
RF Output Connection	Half-height WR90

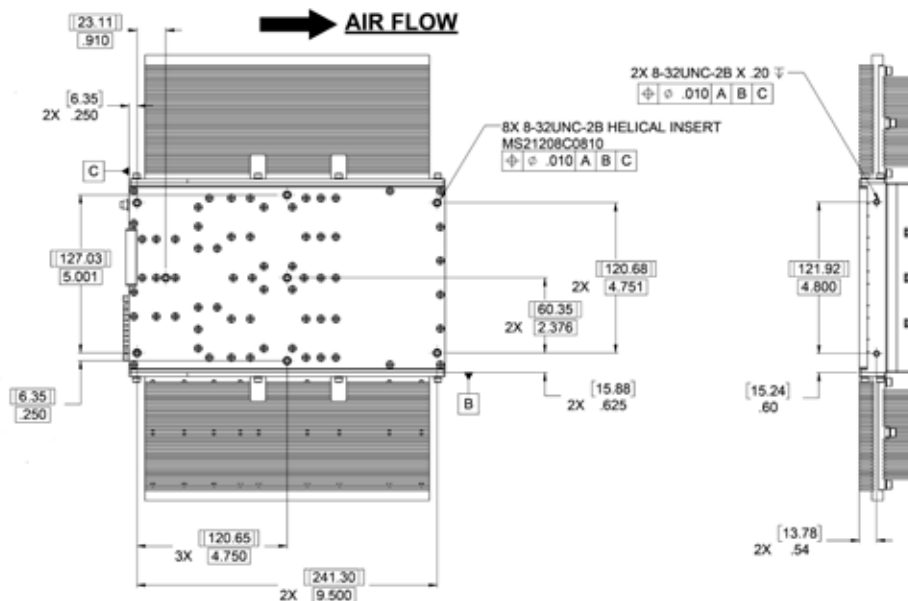
Mechanical

Dimensions (width) 14.1 in (358.14mm)

Dimensions (height) 1.78 in (54.31mm)

Dimensions (depth) 10.0 in (254mm)

Weight 9 lbs. (4.08kg) max.



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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.

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