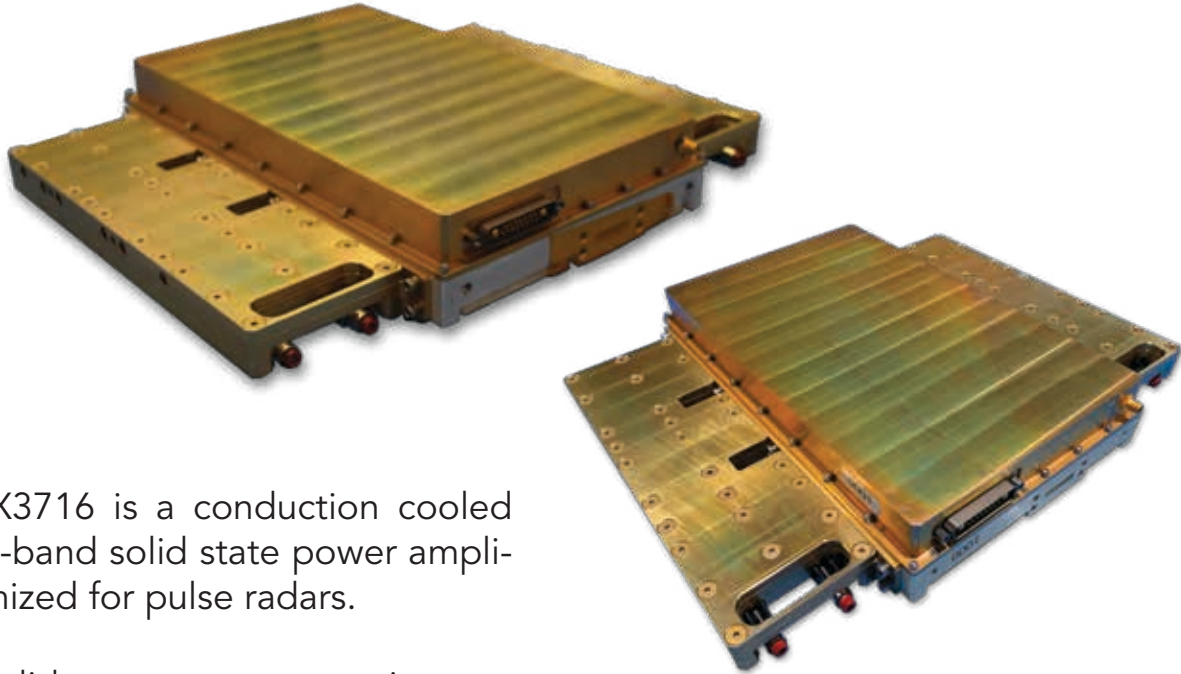


## Communications & Power Industries RF Power Amplifier



CPI's VSX3716 is a conduction cooled 1.5 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 VSX3716 solid state power amplifier is rugged, reliable, and easy to maintain. The VSX3617 solid state transmitter is designed for use in radar applications and covers the 9.0 – 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: 9.0 – 10.0 GHz
- High efficiency GaN transistors
- BIT and controls
- 1500 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: VSX3716

## Specifications

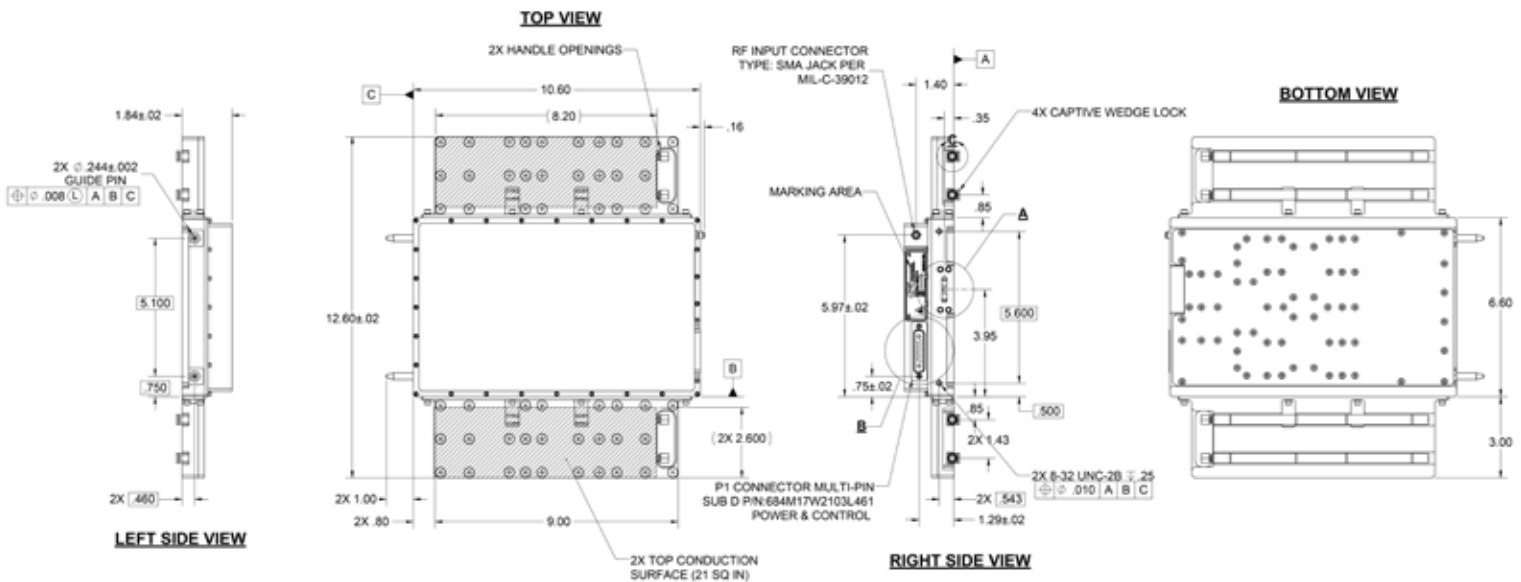
Frequency Range	9.0 to 10.0 GHz
Saturated Peak RF Output	1.5 kW nominal
Typical Pulse Width	1 to 100 $\mu$ sec
Maximum Pulse Droop	1 dB
Maximum Duty Cycle	10%
Output Power Flatness	Dependent on operating bandwidth
Nominal Small Signal Gain	58 dB
Maximum Input VSWR	1.5:1
Maximum Output VSWR	2.0:1
Maximum Harmonic Output	-35 dBc
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	Conduction cooled
RF Input Connection	SMA female
RF Output Connection	Half-height WR90

## Mechanical

Dimensions (width)	12.6 in (32.0 cm)
Dimensions (height)	1.84 in (4.763cm)
Dimensions (depth)	10.6 in (26.9cm)
Weight	12 lbs. (5.44 kg) 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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