

## Communications & Power Industries Beverly Microwave Division Solid State Transmitter



Note: Several form, fit configurations available

### C-Band RF Power Modules

High efficiency, high power and compact with proven GaN technology.

CPI BMD's solid state transmitters are reliable, highly-efficient and easy to maintain. The VSC3698 solid state transmitters are designed for use in maritime, surveillance and weather radar transmitters and cover the 5.4 – 5.9 GHz frequency band. GaN transistors are combined into a 4.0 kW output and are air cooled.

#### FEATURES:

- Four combined 1.1 kW pulsed modules
- High efficiency GaN transistors
- BIT & Controls via Ethernet connection

#### BENEFITS:

- Easy to maintain
- High gain
- Excellent pulse fidelity
- Outstanding spectral performance

#### APPLICATIONS:

- Maritime and defense radars
- High resolution weather radars

# C-Band GaN Pulsed Solid State Transmitter: VSC3698

Note: Can be power-combined for higher power levels

## Specifications

Frequency range	5.4 to 5.9 GHz
Maximum saturated peak RF output	1.1 kW
Typical pulsewidth	1 to 100 $\mu$ sec
Maximum pulsedroop	1.0 dB
Maximum duty cycle	10%
Output power flatness across frequency range	$\pm 1$ dB
Nominal small signal gain	58 dB
Stability	60 dB
Maximum output VSWR	2:0.1
Maximum harmonic output	-35 dBc
NTIA Compliance	Compliant for a radar of this frequency – with customer pulse shaping as required.

## Mechanical and Environmental Specifications

Prime power	55 VDC @ 9.4 Amps
Operating ambient Temperature	+5° to +50° C
Non-condensing relative humidity	95%
Operating altitude	15,000 ft (4.57 km)
Shock and vibration	Rack mounted – shipboard/ground
Cooling	Liquid (propylene glycol) to + 50°C
RF Input connection	BMA Male
RF Output connection	WR 159 Waveguide
RF Output and VSWR monitor	DC Power and Monitor
Dimensions	Nominally 23 in.
Maximum weight	TBD



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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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