



Communications & Power Industries

Beverly Microwave Division

150 Sohier Road • Beverly, MA 01915

Phone: +1(978) 922-6000 • Email: bmdmarketing@cpii.com

www.cpii.com/bmd



Solid State GaN Power Amplifiers

L - Band
S - Band
X - Band

- Solid State Power Amplifiers • Integrated Microwave Assemblies • Receiver Protectors
- Control Components • Transmitters • Amplifiers • Modulators • Magnetrons
- Crossed Field Amplifiers • Ring Loop Traveling Wave Tubes • Power Couplers



GaN Amplifiers provide high gain, high efficiency and excellent stability, with excellent AM/PM and phase-noise performance

L-Band Solid State Power Amplifiers

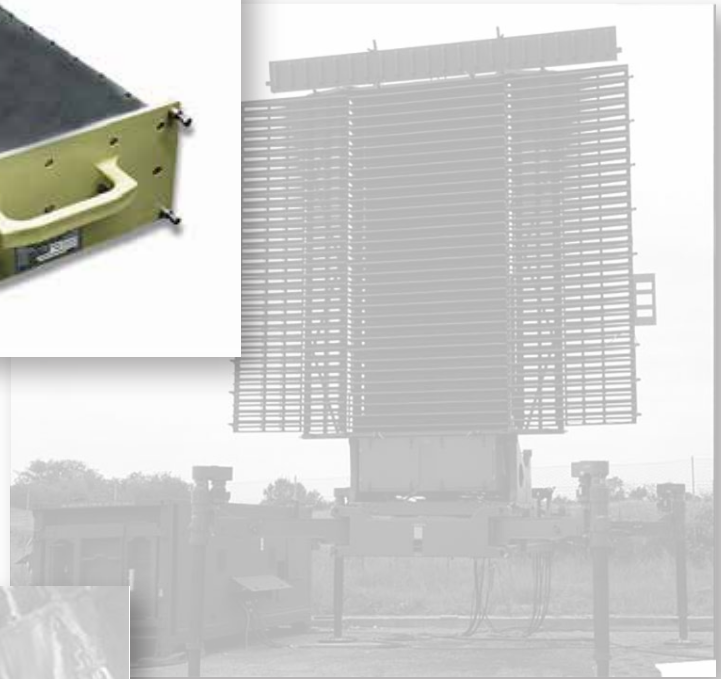
Military Long Range Search Radars

VSL3606 L-Band GaN High Power SSPA

- Frequency range: 1.2 – 1.4 GHz
- 700 Watt modules with ALC (Automatic leveling control)
- Excellent pulse fidelity for radar applications

1.3 kW to 20 kW Amplifiers are available by power combining modules if high power is needed with a single output.

BIT and controls via EIA-422 for remote control and diagnostics.



For use in Particle Accelerators

VSL3616 L-Band GaN - CW, High Power SSPA

- Frequency range: 1.3 GHz
- 700 W CW
- Liquid cooled
- 700 W units can be power-combined using external power combiners if desired for higher power
- Optimized for scientific applications

Excellent AM/PM and phase noise performance for use in particle accelerators.

GaN Amplifiers provide high gain, high efficiency and excellent stability, with excellent AM/PM and phase-noise performance

S-Band Solid State GaN Power Amplifiers

- Frequency range: 2.7 to 2.9 GHz
- BIT and controls via EIA-422 remote connection
- 1.3 kW pulsed modules
- Built-in VSWR protection
- Compliant to NTIA regulatory requirements
- Provide high gain, excellent pulse fidelity
- Excellent pulse fidelity with low AM/PM, phase-noise and spectral regrowth performance
- Easy to maintain

For use in Air Traffic Control radar systems

VSS3617 S-Band GaN High Power Transmitters

- Transmitter cabinet with 12 kW minimum peak output power
- Soft fail by virtue of power combining
- Full redundancy
- >160 dB of power attenuation available
- Designed for ATC shelter applications

VSS3634 S-Band GaN High Power SSPA

- 1.3 kW pulsed modules that can be power combined for higher peak power output
- Internal processor with BITE monitoring
- Self protecting



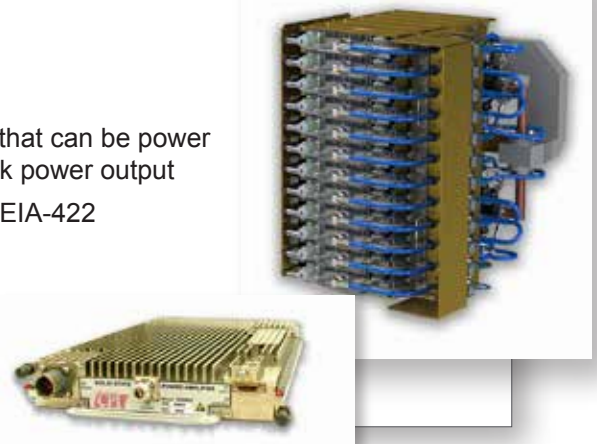
Military Precision Approach Radar Transmitters

VSS3635 S-Band GaN High Power Transmitters

- Transmitter with 10 kW minimum peak power output.
- Soft fail by virtue of power combining
- Excellent noise performance due to operation off of stored energy during the RF pulse
- Designed for small mobile applications

VSS3607 S-Band GaN High Power SSPA

- 1.3 kW pulsed modules that can be power combined for higher peak power output
- Internal BIT circuitry via EIA-422 remote connection
- Self protecting

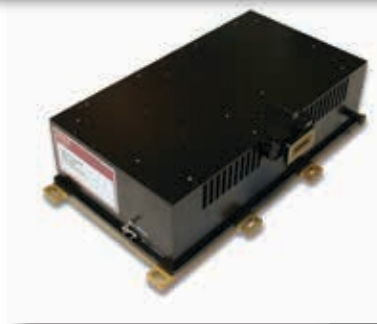


X-Band Solid State Power Amplifiers

Ruggedized for use in airborne radars

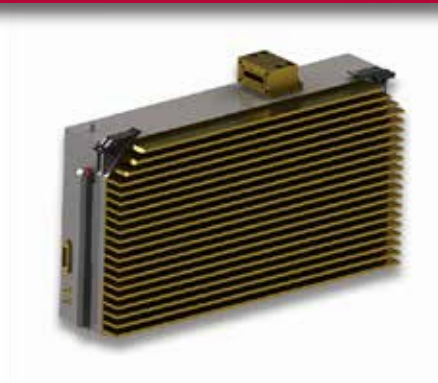
VSX3630 X-Band GaN High Power SSPA

- Frequency range: 7.8 to 9.8 GHz
- BIT and controls via EIA-422 remote
- 900 W pulsed modules at 20% duty
- 1.5 kW peak power and up to 12 kW when power combined



VSX3614 X-Band GaN High Power SSPA

- Frequency range: 8.8 to 9.6 GHz
- High efficiency GaN transistors
- BIT and controls via EIA-422 remote connection
- 900 W peak pulsed modules at 10% duty that can be power combined



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Communications & Power Industries (CPI) develops, manufactures and globally distributes components and subsystems used in the generation, amplification, transmission and reception of microwave signals for a wide variety of systems including radar, electronic warfare and communications (satellite and point-to-point) systems for military and commercial applications, specialty products for medical diagnostic imaging and the treatment of cancer, as well as microwave and RF energy generating products for various industrial and scientific pursuits.

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.

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