

# Beverly Microwave Division 150 Sohier Road • Beverly, MA USA 01915

150 Sohier Road • Beverly, MA USA 01915 +1(978) 922-6000 • BMDmarketing@cpii.com www.cpii.com/BMD









## **Solid State GaN Power Amplifiers**

L-Band

S-Band

C-Band

X-Band





### Beverly Microwave Division www.cpii.com/BMD

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

## X - Band Solid State Power Amplifiers

Ruggedized for use in pulsed airborne, naval and ground radar

#### X-Band GaN 1.8 kW High Power SSPA

- Frequency range: 9.0 10.0 GHz
- BIT and controls
- Pulsed modules at 10% duty
- 1.8 kW peak power
- Easily combined to create high power X-band radar transmitters

#### X-Band GaN 1.0 kW High Power SSPA

- Frequency range: 9.0 10.0 GHz
- · BIT and controls
- Pulsed modules at 10% duty
- 1.0 kW peak power
- · Easily combined to create high power X-band radar transmitters





## C-Band Solid State Power Amplifiers

Critical for today's weather forecasting



#### C-Band GaN 4.0 kW **High Power SSPA**

- 1.1 kW pulsed module
- BIT and controls via EIA-422 remote connection
- Easily combined to create high power C-band radar transmitters

#### C-Band GaN 2.0 kW **High Power SSPA**

- Frequency range: 5.4 5.9 GHz Frequency range: 5.4 5.9 GHz
  - 2.0 kW pulsed
  - BIT and controls via EIA-422 remote connection
  - Graceful power degradation
  - Liquid or Air cooled options available





# Beverly Microwave Division www.cpii.com/BMD

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

#### 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

#### 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





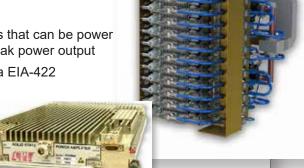
#### For use in Precision Approach Radar Transmitters

#### 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

#### 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







## L-Band Solid State Pulsed Instrumentation Amplifier

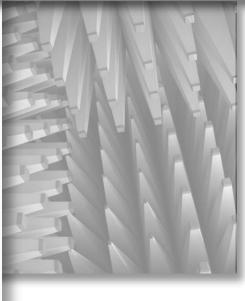
#### For use in EMC Testing

#### L-Band GaN 4 and 8 kW High Power SSPA PIA

- Frequency range:1 2 GHz
- GaN based
- Versatile
- · Suitable for lab environments
- Designed for the global market
- Modular assembly and built-in fault diagnostics for easy maintenance

2 kW to 8 kW Amplifiers are available by power combining modules if high power is needed with a single output.





## L-Band Solid State CW Amplifier



#### For use in Particle Accelerators

#### L-Band GaN 700 W 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.

#### CPI: At the Heart of Leading Technologies

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.