GaN Solid State Power Amplifiers

CPI | GaN SSPA

CPI Beverly Microwave Division is now building solid state power amplifiers using gallium nitride (GaN) transistors for L,S,C & X-band.

FEATURES

- **High efficiency GaN**
- **BIT and controls via EIA-422 remote connection**
- **Phase matched for power combining**
- **Novel power combining techniques**
- **Cabinet mount enclosures**
- **Phased array radar modules**

L-band SSPA
- **700 watt CW & pulsed modules**

S-band SSPA
- **1.3 kW pulsed modules**
- **Up to 25kW Power combined**

C-band SSPA
- **New design effort (2014)**
- **1 kW watt pulsed modules**

X-band SSPA
- **900 watt pulsed modules**

L- Band Typical Operating Parameters		
Item	Value	Units
Frequency	1.2-1.4	GHz
Peak Power	700	W
Average Power	700	kW

S-Band 1.3KW SSPA

S-Band Typical Operating Parameters		
Item	Value	Units
Frequency	2.7 – 2.9	GHz
Frequency (In design)	2.9-3.1 / 3.1-3.5	GHz
Peak Power	1.3	kW
Duty	10	%
Duty (in design)	20	%

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.

For information on this and other CPI products visit our webpage at www.cpii.com, or contact CPI Beverly Microwave Division, 150 Sohier Road, Beverly, MA 01915
Telephone: 1 (978) 922-6000 FAX: 1 (978) 922-8914 email: marketing@cpii.com

Solid State GaN Transmitter

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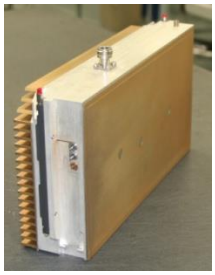
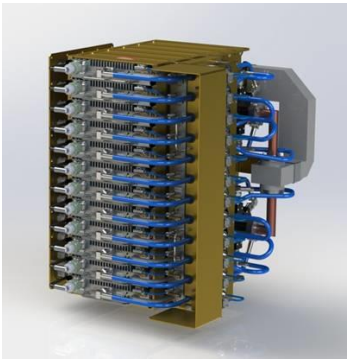
C-Band Typical Operating Parameters		
Item	Value	Units
Frequency	5.4-5.9	GHz
Peak Power	1	kW
Duty	10	%

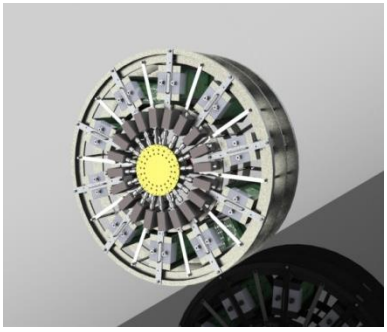
X-Band Typical Operating Parameters		
Item	Value	Units
Frequency	8.8-9.6	GHz
Peak Power	900	W
Duty	10	%



X Band SSPA

Power Combining Schemes





Certificate Number: 11607

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