

Analog Devices Welcomes Hittite Microwave Corporation

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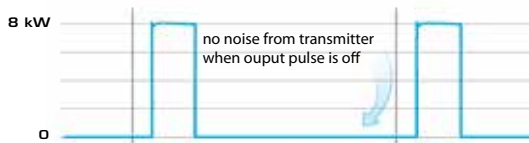
Typical Applications

- Commercial Radar
- Military Radar
- Electronic Warfare
- Test Equipment

Solid State Microwave Power Modules



500W DDH



General Description

The KHPA-0811 8000WPA X-band power amplifiers provide four times the power density of our past product. Because our amplifiers are “off” between pulses, the receiving signal-to-noise ratio and dynamic range are greatly improved, providing superior radar resolution and range.

High power in a small package, our Dodecahedron package (DDH) is designed to pack a considerable amount of power in a small footprint plus cover a wide bandwidth. Only 2.3” x 2.5” dia., these DDHs are modular so that they can be combined in Solid-State Microwave Power Module housings. One DDH will provide 500W, two DDHs will provide 1000W and four DDHs will provide 2000W pulsed output in the X-Band. In this case, four 2000W Solid-State Microwave Power Modules (SSMPMs) are combined to obtain 8 kW output.

The information provided in this document is for a product controlled by the International Traffic in Arms Regulations (ITAR). This product cannot be shipped outside of the United States without a U.S. Department of State export license.

Features

- Highest Power
- Smallest Footprint
- Lightest Weight



Stack of four 2000W MPAs

Table 1. Specifications

Input Power	
DC Power	48VDC
Output Specifications [@ 25° C]	
Frequency Range	8 -11 GHz
Saturated Power Output	8000 Watts (4 SSMPMs)
Rise/Fall Time	200 nsec Max
Pulse Width	.05 to 100 µsec
Duty Cycle	20%
In/Out VSWR	1.5:1
Out of Band Spurious Noise	-70.0 dBc Max
2nd Harmonic	-40.0 dBc Max
Connectors	
RF Input	SMA Female
RF Output	Waveguide
Mechanical	
Size approx. 16”x12”x8”	
Compact Aluminum or Copper Housings	
Depending on Duty Cycle	
Chassis Grounded	
Conduction Cooling	
Environmental	
Operating Temperature	-20° to 75° C
Storage Temperature	-40° to 50° C
Relative Humidity	5 to 95% non-condensing
MTBF	
200,000 hours	