

# SHORT FORM 2017

## High Power, RF and microwave Pulsed Amplifiers



GERAC is a 100 % THALES subsidiary, created in 1985 by Thales Communication & Security, as an expertise centre specialized in radio-frequency and microwave high power amplifiers.

GERAC is an international industrial actor in RF and microwave electronic areas thanks to wide ranges of products, services and skills.

### Others product lines :

High power CW narrow amplifiers  
80 – 1300 MHz 10-150kW CW

Very high microwaves power sources  
1-40 GHz 10kW-30MW pulsed power

Lightning generators  
10 – 200 kA

HV modulators  
50-220 kV 10-600kW



## Pulsed Power Amplifiers

PULSED POWER AMPLIFIERS 0.8 GHz to 2.5 GHz			
Model	Rated Power	Pulse width	Duty cycle
PWS1-0.8G2.5A	1 kW	0.1-100 $\mu$ s	5 %
PWS2-0.8G2.5A	2 kW	0.1-100 $\mu$ s	5 %
PWS5-0.8G2.5A	5 kW	0.1-100 $\mu$ s	5 %
PWS8-0.8G2.5A	8 kW	0.1-100 $\mu$ s	5 %
PWS10-0.8G2.5A	10 kW	0.1-100 $\mu$ s	5 %

PULSED POWER AMPLIFIERS 0.9 GHz to 1.2 GHz			
Model	Rated Power	Pulse width	Duty cycle
PWS2-0.9G1.2A	2 kW	0.1-20 $\mu$ s	1 %
PWS2-0.9G1.2B	2 kW	0.1-100 $\mu$ s	10 %
PWS5-0.9G1.2A	5 kW	0.1-20 $\mu$ s	1 %
PWS5-0.9G1.2B	5 kW	0.1-100 $\mu$ s	10 %

PULSED POWER AMPLIFIERS 1 GHz to 2 GHz			
Model	Rated Power	Pulse width	Duty cycle
PWS1-1G2B	1kW	0.1-50 $\mu$ s	6%
PWS2-1G2B	2kW	0.1-50 $\mu$ s	6%
PWS2-1G2C	2kW	0.1-100 $\mu$ s	10%
PWS4-1G2B	4kW	0.1-50 $\mu$ s	6%
PWS4-1G2C	4kW	0.1-100 $\mu$ s	10%
PWS8-1G2A	8kW	10 $\mu$ s	1%
PWS8-1G2B	8kW	0.1-50 $\mu$ s	6%
PWS8-1G2C	8kW	0.1-100 $\mu$ s	10%
PWS10-1G2B	10kW	0.1-50 $\mu$ s	6%
PWS12-1G2B	12kW	0.1-50 $\mu$ s	6%
PWS18-1G2B	18kW	50 $\mu$ s	5%
PWS20-1G2A	20kW	10 $\mu$ s	1%
PWS20-1G2B	20kW	0.1-50 $\mu$ s	6%
PWS50-1G2B	50kW	0.1-50 $\mu$ s	6%

PULSED POWER AMPLIFIERS 1.2 GHz to 1.4 GHz			
Model	Rated Power	Pulse width	Duty cycle
PWS1-1.2G1.4A	1kW	0.1-30 $\mu$ s	1%
PWS1-1.2G1.4B	1kW	0.1-300 $\mu$ s	12%
PWS2-1.2G1.4A	2kW	0.1-30 $\mu$ s	1%
PWS4-1.2G1.4A	4kW	40 $\mu$ s	1%
PWS5-1.2G1.4A	5kW	0.1-30 $\mu$ s	1%
PWS5-1.2G1.4B	5kW	0.1-300 $\mu$ s	12%
PWS8-1.2G1.4A	8kW	0.1-40 $\mu$ s	1%
PWS10-1.2G1.4A	10kW	0.1-30 $\mu$ s	1%
PWS10-1.2G1.4B	10kW	0.1-300 $\mu$ s	12%
PWS20-1.2G1.4A	20kW	0.1-30 $\mu$ s	1%
PWS50-1.2G1.4A	50kW	0.1-30 $\mu$ s	1%
PWS80-1.2G1.4A	80kW	0.1-30 $\mu$ s	1%
PWS140-1.2G1.4A	140kW	0.1-30 $\mu$ s	1%
PWS80-1.2G1.4M	80kW militarized	0.1-100 $\mu$ s	4%
PWS140-1.2G1.4M	140kW militarized	0.1-100 $\mu$ s	4%

### PULSED POWER AMPLIFIERS 2 GHz to 4 GHz

Model	Rated Power	Pulse width	Duty cycle
PWS1-2G4B	1 kW	0.1-50 $\mu$ s	6 %
PWS1-2G4C	1 kW	0.1-100 $\mu$ s	10 %
PWS2-2G4B	2 kW	0.1-50 $\mu$ s	6 %
PWS2-2G4C	2 kW	0.1-100 $\mu$ s	10 %
PWS3-2G4B	3 kW	0.1-50 $\mu$ s	6 %
PWS3-2G4C	3 kW	0.1-100 $\mu$ s	10 %
PWS4-2G4C	4 kW	0.1-100 $\mu$ s	10 %
PWS5-2G4B	5 kW	0.1-50 $\mu$ s	6 %
PWS6-2G4B	6 kW	0.1-100 $\mu$ s	10 %
PWS6.9-2G4B	6.9 kW	0.1-50 $\mu$ s	6 %
PWS8-2G4B	8 kW	0.1-50 $\mu$ s	6 %
PWS8-2G4C	8 kW	0.1-100 $\mu$ s	10 %
PWS10-2G4B	10 kW	0.1-50 $\mu$ s	6 %
PWS10-2G4C	10 kW	0.1-100 $\mu$ s	10 %
PWS12-2G4B	12 kW	0.1-50 $\mu$ s	6 %
PWS15-2G4B	15 kW	0.1-50 $\mu$ s	6 %
PWS20-2G4B	20 kW	0.1-50 $\mu$ s	6 %
PWS25-2G4A	25 kW	0.1-5 $\mu$ s	1 %
PWS80-2G4B	80 kW	0.1-5 $\mu$ s	1 %

### PULSED POWER AMPLIFIERS 2.2 GHz to 2.7 GHz

Model	Rated Power	Pulse width	Duty cycle
PWS2-2.2G2.7A	2 kW	1-20 $\mu$ s	1%
PWS4-2.2G2.7A	4 kW	1-20 $\mu$ s	1%
PWS8-2.2G2.7A	8 kW	1-20 $\mu$ s	1%
PWS10-2.2G2.7A	10 kW	1-20 $\mu$ s	1%
PWS20-2.2G2.7A	20 kW	1-20 $\mu$ s	1%
PWS60-2.2G2.7A	60 kW	1-20 $\mu$ s	1%

### PULSED POWER AMPLIFIERS 2.5 GHz to 7.5 GHz

Model	Rated Power	Pulse width	Duty cycle
PWS1-2.5G7.5A	1 kW	100 $\mu$ s	5 %
PWS2-2.5G7.5A	2 kW	100 $\mu$ s	5 %

### PULSED POWER AMPLIFIERS 2.6 GHz to 3.3 GHz

Model	Rated Power	Pulse width	Duty cycle
PWS2-2.6G3.3A	2 kW	1-20 $\mu$ s	1 %
PWS4-2.6G3.3A	4 kW	1-20 $\mu$ s	1 %
PWS8-2.6G3.3A	8 kW	1-20 $\mu$ s	1 %
PWS10-2.6G3.3A	10 kW	1-20 $\mu$ s	1 %
PWS20-2.6G3.3A	20 kW	1-20 $\mu$ s	1 %
PWS50-2.6G3.3A	50 kW	1-20 $\mu$ s	1 %



### PULSED POWER AMPLIFIERS 2.7 GHz to 3.1 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS1-2.7G3.1A</b>	1 kW	1-30 $\mu$ s	1 %
<b>PWS2-2.7G3.1A</b>	2 kW	1-200 $\mu$ s	10 %
<b>PWS4-2.7G3.1A</b>	4 kW	1-6 $\mu$ s	1 %
<b>PWS4-2.7G3.1B</b>	4 kW	1-200 $\mu$ s	10 %
<b>PWS6-2.7G3.1A</b>	6 kW	1-200 $\mu$ s	10 %
<b>PWS8-2.7G3.1A</b>	8 kW	1-6 $\mu$ s	1 %
<b>PWS8-2.7G3.1B</b>	8 kW	1-200 $\mu$ s	10 %
<b>PWS10-2.7G3.1B</b>	10 kW	1-200 $\mu$ s	10 %
<b>PWS20-2.7G3.1B</b>	20 kW	1-200 $\mu$ s	10 %
<b>PWS50-2.7G3.1A</b>	50 kW	1-5 $\mu$ s	1 %
<b>PWS50-2.7G3.1B</b>	50 kW	1-200 $\mu$ s	10 %

### PULSED POWER AMPLIFIERS 2.9 GHz to 3.5 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS2-2.9G3.5A</b>	2 kW	1-300 $\mu$ s	12 %
<b>PWS8-2.9G3.5A</b>	8 kW	1-300 $\mu$ s	12 %

### PULSED POWER AMPLIFIERS 3.5 GHz to 3.7 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS6-3.5G3.7</b>	6 kW	100 $\mu$ s	5 %

### PULSED POWER AMPLIFIERS 4 GHz to 8 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS1-4G8B</b>	1 kW	50 $\mu$ s	4 %
<b>PWS2-4G8B</b>	2 kW	50 $\mu$ s	4 %
<b>PWS4-4G8B</b>	4 kW	50 $\mu$ s	4 %
<b>PWS6.9-4G8B</b>	6.9 kW	50 $\mu$ s	4 %
<b>PWS20-4G8A</b>	20 kW	40 $\mu$ s	2 %
<b>PWS25-4G8B</b>	25 kW	50 $\mu$ s	4 %

### PULSED POWER AMPLIFIERS 5.4 GHz to 5.7 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS2-5.4G5.7B</b>	2 kW	1-200 $\mu$ s	10 %
<b>PWS10-5.4G5.7B</b>	10 kW	1-200 $\mu$ s	10 %

### PULSED POWER AMPLIFIERS 7.9 GHz to 9.6 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS1-7.9G9.6A</b>	1 kW	0.1-100 $\mu$ s	5 %
<b>PWS2-7.9G9.6A</b>	2 kW	0.1-100 $\mu$ s	5 %
<b>PWS5-7.9G9.6A</b>	5 kW	0.1-100 $\mu$ s	5 %
<b>PWS10-7.9G9.6A</b>	10 kW	0.1-100 $\mu$ s	5 %

### PULSED POWER AMPLIFIERS 9 GHz to 9.5 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS0.4-9G9.5B</b>	400 W	100 $\mu$ s	10 %
<b>PWS2-9G9.5A</b>	2 kW	50 $\mu$ s	5 %
<b>PWS4-9G9.5A</b>	4 kW	50 $\mu$ s	5 %

### PULSED POWER AMPLIFIERS 9.1 GHz to 10.3 GHz

Model	Rated Power	Pulse width	Duty cycle
<b>PWS1-9.1G10.3A</b>	1 kW	0.1-100 $\mu$ s	5 %
<b>PWS2-9.1G10.3A</b>	2 kW	0.1-100 $\mu$ s	5 %
<b>PWS5-9.1G10.3A</b>	5 kW	0.1-100 $\mu$ s	5 %
<b>PWS10-9.1G10.3A</b>	10 kW	0.1-100 $\mu$ s	5 %

### PULSED POWER AMPLIFIERS 8 GHz to 18 GHz

Under studies