

VBA2000-4000P

1-2GHz 4kW Pulsed Amplifier

- Solid State GaN Technology
- RTCA DO-160 Section 20 testing
- CW Capability
- Internal Pulse Generation

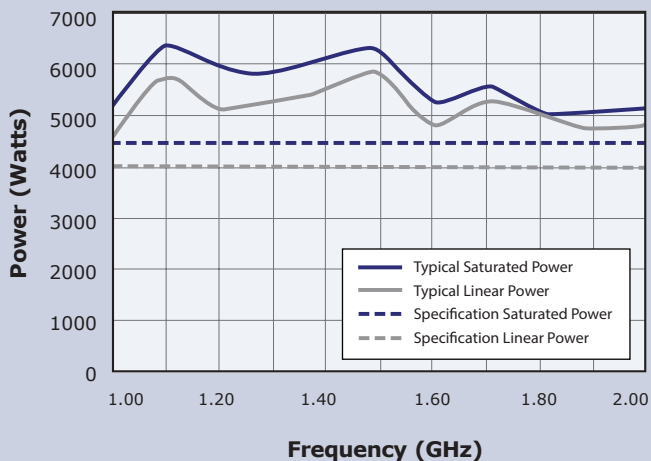


The **VBA 2000-4000P** is a pulsed amplifier operating over the 1-2GHz frequency band with 4kW output power.

It utilizes GaN technology for its specific suitability for this application, giving high pulse power and solid state reliability.

The amplifier runs in class AB linear mode with modest CW output capability, making it suitable for CW and SW tests as well as Pulsed Mode radiated susceptibility in Section 20 of the RTCA DO-160 standard, with a suitable antenna and chamber. The amplifier incorporates an internal pulse modulator, programmable from either the front panel or remote control.

Performance Chart



See overleaf for technical specification

Electrical

Frequency range (instantaneous)	1-2 GHz
Rated output power	4.5kW minimum pulsed, 50W CW
Output power at 1dB gain compression	4kW pulsed typical
Gain	66dB min at rated output
Gain variation with frequency	±2dB
Harmonics at 4kW pulsed	Better than -20dBc
Output impedance	50 Ohms
Stability	Unconditional
Output VSWR tolerance (see note 1)	Infinity:1
Input VSWR	2:1 (Max)
Supply voltage	200-240V ac
Supply frequency range	50-60Hz
Supply power	<3kVA (Max)
Mains connector	IEC320-C20
Pulse rise/fall time	<50ns
Pulse delay (external)	<200ns
Pulse width	100µs max at 4kW
Duty cycle	10% max at 4kW

Pulse Generator

Pulse width range	0.1-500µs
Pulse repetition frequency	100-10,000Hz

Mechanical

RF Connector Style	Input N(f), output DIN 7-16(f)
Safety Interlock	2 x BNC(f), S/C and O/C to mute
Pulse In/Out	BNC(f)
Ethernet/USB/GPIB interface	Standard
Dimensions	19 inch, 9U case, 550mm deep
Mass	47kg
Operating Temperature Range	0-40°C
Case style options	Rack mount with rear panel connectors

Regulatory Compliance

Conducted and Radiated Emissions	EN61326 Class A
Conducted and Radiated Immunity	EN61326:2013 table 1
Safety	EN61010-1

Notes

- Output VSWR tolerance is specified for excitation within the permitted levels and frequency range. The amplifier may limit at >1kW reflected power.

**Represented Worldwide**

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