

VBA100-3000

0.01 - 100MHz 3000W Amplifier

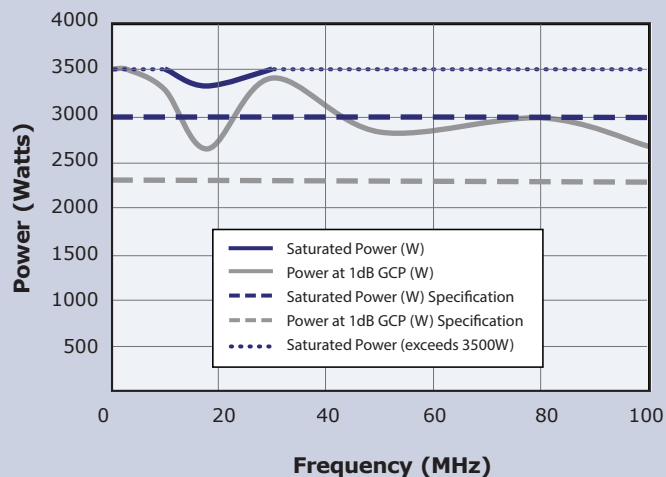
- Robust silicon MOSFET push-pull output design
- High efficiency proprietary combiner design
- Class A for maximum mismatch drive
- General linear power requirements

The **VBA 100-3000** is a member of our family of 10kHz-100MHz high power amplifiers, designed primarily for EMC applications.

The VBA100 series, is based on high performance silicon push-pull MOSFET output stages. The amplifier utilizes exclusive power combining techniques, minimizing loss for a more efficient solution.



Performance Chart



The amplifier can be controlled from either the front panel or remote control via the Ethernet, USB and GPIB interfaces. The digital interface system manages enabling and disabling the amplifier, monitoring power levels, monitoring power supply health, communicating with the control computer and implementing electrical interlocks. The keypad and display interface is used for monitoring amplifier state, power levels, interlock states etc. and for configuration options.

The amplifier operates in class A, the benefits for EMC applications being very low distortion and tolerance of 100% mismatch without foldback up to 50% reflection.

See overleaf for technical specification

Electrical

Frequency Range (Instantaneous)	10kHz-100MHz
Rated Output Power	3000W Min
Output Power at 1dB Gain Compression	2300W Min
Gain	64dB Min
Third Order Intercept Point (see note 1)	70dBm
Gain variation with Frequency	±3dB
Harmonics at 2100W Output Power	Better than -20dBc
Output Impedance	50 Ohms
Stability	Unconditional
Output VSWR Tolerance (see note 2)	Infinity any phase
Input VSWR	2:1 (Max)
Supply Voltage	200-240V or 350-415V ac (see options for 3 phase configuration)
Supply Frequency Range	45-63Hz
Supply Power	11kVA
Mains Connector	Appropriate IEC 60309 plug (see Options)

Mechanical

RF Connector Style	Input type N female, output 7/16 female
Safety Interlock	2 x BNC, S/C and O/C to Mute
Communication Interface	USB/GPIB/Ethernet
Dimensions	34U Rack, 800mm Deep
Mass	291kg
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

Options	3 Phase delta connection (No neutral, 4 pin plug) 3 Phase star connection (With Neutral, 5 pin plug)
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Notes

- 1 The third order intercept point is a nominal value, as its calculation depends upon the power level at which distortion measurements are made.
- 2 Output VSWR tolerance is specified for excitation within the permitted levels and frequency range.

**Represented Worldwide**

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