

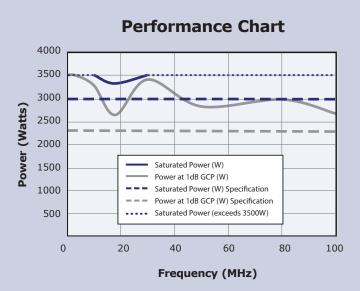
# **VBA100-3000**

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.





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 3000W Min **Rated Output Power 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

Safety Interlock

Communication Interface

Dimensions

Mass

Operating Temperature Range

Case Style Options

Input type N female, output 7/16 female

2 x BNC, S/C and O/C to Mute

USB/GPIB/Ethernet

USB/GPIB/Ethernet

34U Rack, 800mm Deep

491kg

0-40°C

Rack Mount with rear panel connectors

## Regulatory Compliance

Conducted and Radiated EmissionsEN61326 Class AConducted and Radiated ImmunityEN61326:2013 Table 1SafetyEN61010-1

**Options** 3 Phase delta connection (No neutral, 4 pin plug)

3 Phase star connection (With Neutral, 5 pin plug)

# 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.





**Designers and Manufacturers of Solid State RF and Microwave Amplifiers** 

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