

# VBA100-400

10kHz - 100MHz 400W Amplifier

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

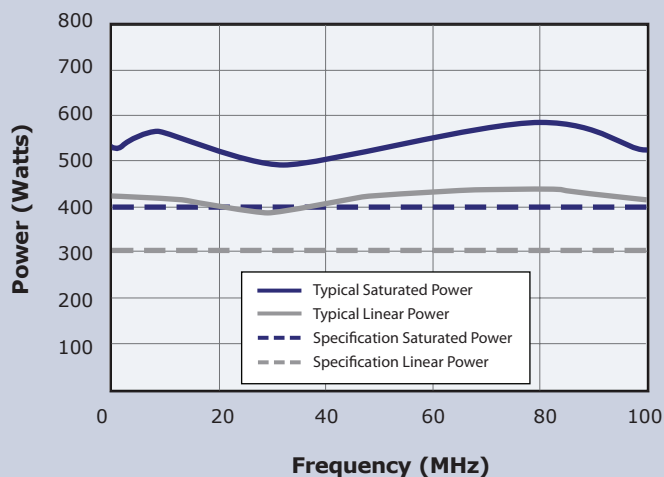
The **VBA100-400** is a member of our family of 10kHz-100MHz high power amplifiers, designed primarily for EMC applications.

Like all our products of the VBA100 series, it 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 operates in class A, the benefits for EMC applications being very low distortion and tolerance of 100% mismatch. Fold-back protection is neither fitted nor needed! This makes it supremely suited for very demanding antenna and test chamber requirements

**Performance Chart**



Choose **Vectawave** for high efficiency and performance in your regular power amplifier requirements.

**See overleaf for technical specification**

## Specifications

## VBA100-400

### Electrical

<b>Frequency Range (Instantaneous)</b>	10kHz-100MHz
<b>Rated Output Power</b>	400W Min (500W typical)
<b>Output Power at 1dB Gain Compression</b>	300W Min (400W typical)
<b>Gain</b>	57dB Min
<b>Third Order Intercept Point (see note 1)</b>	67dBm
<b>Gain variation with Frequency</b>	±2dB
<b>Harmonics at 250W Output Power</b>	Better than -20dBc
<b>Harmonics at 300W Output Power</b>	Better than -18dBc
<b>Output Impedance</b>	50 Ohms
<b>Stability</b>	Unconditional
<b>Output VSWR Tolerance (see note 2)</b>	Infinity:1
<b>Input VSWR</b>	2:1 (Max)
<b>Supply Voltage</b>	184-264V ac
<b>Supply Frequency Range</b>	47-63Hz
<b>Supply Power</b>	<2kVA (Max)
<b>Mains Connector</b>	IEC320

### Mechanical

<b>RF Connector Style</b>	Type N Female
<b>Safety Interlock</b>	2 x BNC, S/C and O/C to Mute
<b>USB/GPIB Interface</b>	Optional
<b>Dimensions</b>	19 inch, 9U Rack, 570mm Deep
<b>Mass</b>	33kg
<b>Operating Temperature Range</b>	0-40°C
<b>Case Style Options</b>	Rack mount with Rear panel connectors

### Regulatory Compliance

<b>Conducted and Radiated Emissions</b>	EN61326 Class A
<b>Conducted and Radiated Immunity</b>	EN61326:1997 Table 1
<b>Safety</b>	EN61010-1

### 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



**Vectawave**  
Technology Limited  
Designers and Manufacturers of Solid State RF and Microwave Amplifiers

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