

VBA1000-1000

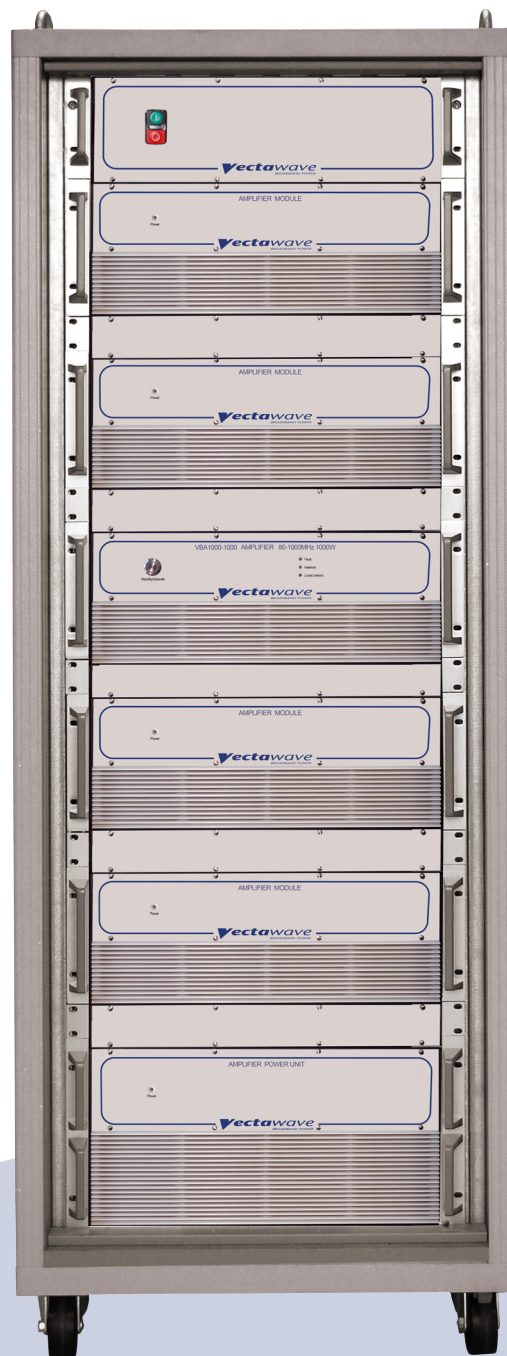
80 - 1000MHz 1000W Amplifier

- High reliability proven GaAs design
- Higher performance and efficiency than silicon alternatives
- Lower cost than comparable GaN solutions
- Class A for maximum mismatch drive
- Automotive testing
- General linear power requirements

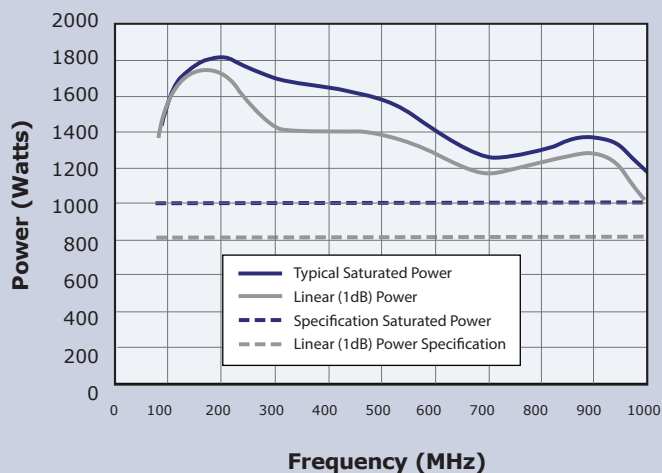
The **VBA1000-1000** is a member of our family of 80-1000MHz high power amplifiers, designed primarily for EMC applications.

Like all our products of the VBA1000 series, it is based on our unique GaAs technology, offering the user the benefits of higher linearity, ruggedness and efficiency than its silicon-based counterparts and lower cost than the more recent GaN additions to the marketplace.

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 **GaAs Class A** for the ultimate in linearity, ruggedness, efficiency and cost - only from Vectawave.

Electrical

Frequency Range (Instantaneous)	80-1000MHz
Rated Output Power	1000W Min (1400W typical 80-500MHz)
Output Power at 1dB Gain Compression	800W Min (1200W typical 80-500MHz) (1000W typical 500MHz-1.0GHz)
Gain	61dB Min
Third Order Intercept Point (see note 1)	70dBm
Gain variation with Frequency	±3dB
Harmonics at 800W Output Power	Better than -20dBc
Output Impedance	50 Ohms
Stability	Unconditional
Output VSWR Tolerance (see note 2)	Infinity any Phase
Input VSWR	1.5:1 (Max)
Input power required for 1000W output.	0dBm (Max)
Maximum permitted input power.	10dBm
Supply Voltage	see Options for 3 Phase configuration
Supply Frequency Range	45-63Hz
Supply Power	<6kVA (Max)
Mains Connector	Appropriate IEC60309 plug (see options)
Cooling	Air cooled with internal fans

Mechanical

RF Connector Style	Input Type N Female, Output 7/16 Female
Safety Interlock	2 x BNC, S/C and O/C to Mute
USB/GPIB Interface	Optional
Dimensions	19 inch 34U rack, 800mm deep
Mass	200kg
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	EN61326:1997 Table 1
Safety	EN61010-1

Options	3 Phase Delta (5 pin plug) or 3 Phase Star (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

