

VBA1000-100

80 - 1000MHz 100W 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

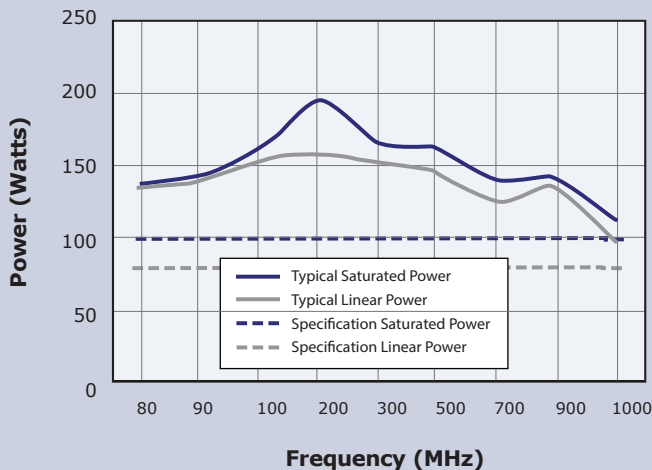
The **VBA1000-100** is a member of our family of 80-1000MHz high power amplifiers, designed primarily for EMC applications.

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	100W Min (110W typical)
Output Power at 1dB Gain Compression	90W Min (95W typical)
Gain	51dB Min
Third Order Intercept Point (see note 1)	60dBm
Gain variation with Frequency	±2dB
Harmonics at 90W Output Power	Better than -20dBc
Output Impedance	50 Ohms
Stability	Unconditional
Output VSWR Tolerance (see note 2)	Infinity:1
Input VSWR	2:1 (Max)
Supply Voltage	85-264V ac
Supply Frequency Range	45-63Hz
Supply Power	<1kVA (Max)
Mains Connector	IEC320

Mechanical

RF Connector Style	Type N Female
Safety Interlock	2 x BNC, S/C and O/C to mute
USB/GPIB Interface	Optional
Dimensions	19 inch, 4U Case, 550mm deep
Mass	23kg
Operating Temperature Range	0-40°C
Case Style Options	Rack mount with Front or Rear panel connectors Bench mount with Front panel connectors

Regulatory Compliance

Conducted and Radiated Emissions	EN61326 Class A
Conducted and Radiated Immunity	EN61326:1997 Table 1
Safety	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

