Vectawave
Technology Limited

VBA1000-2000

200 - 1000MHz 2000W Amplifier

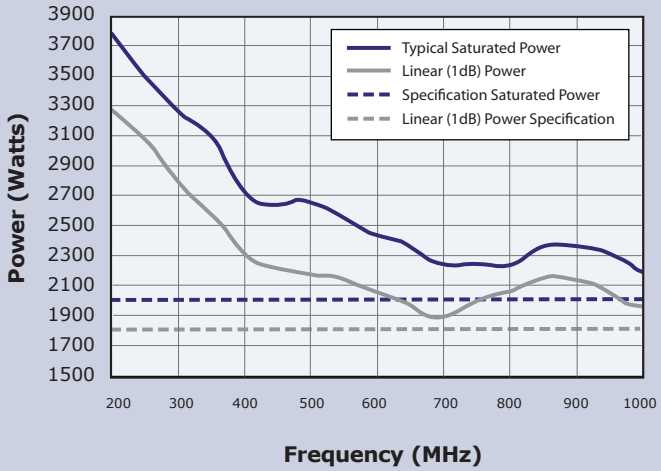
- **High reliability proven GaAs design**
- **Higher performance and efficiency than silicon alternatives**
- **Lower cost than comparable GaN solutions**
- **Class A for maximum mismatch drive**
- **Automotive testing**
- **General linear power requirements**

The **VBA1000-2000** is a 200-1000MHz high power amplifier, 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.

Specifications VBA1000-2000

Electrical

Frequency Range (Instantaneous)	200-1000MHz
Rated Output Power	2000W Min (2500W typical 200-500MHz)
Output Power at 1dB Gain Compression	1800W Min (2000W typical 200-500MHz) (1900W typical 800MHz-1.0GHz)
Gain	64dB Min
Third Order Intercept Point (see note 1)	74dBm
Gain variation with Frequency	±3dB
Harmonics at 1800W 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	184-264V AC Delta or 319-457 AC Star
Supply Frequency Range	45-63Hz
Supply Power	<12kVA (Max)
Mains Connector	Appropriate IEC60309 plug (see options)

Mechanical

RF Connector Style	Input Type N Female, Output 1-5/8" EIA Flange
Safety Interlock	2 x BNC, S/C and O/C to Mute
USB/GPIB Interface	Optional
Dimensions	2x34U Rack plus 200mm centre panel, 800mm Deep
Mass	400kg
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
Mains Harmonic Currents	EN61000-3-2
Voltage Fluctuations and Flicker	EN61000-3-3

Options	3 Phase plus P.E. Delta Connection (No neutral) 3 Phase, Neutral plus P.E. Star Connection

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

ACS REGISTRARS Quality Assurance ISO 9001 UKAS 229

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Designers and Manufacturers of Solid State RF and Microwave Amplifiers