

VBA1000-18

100kHz - 1000MHz 18W 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
- General linear power requirements

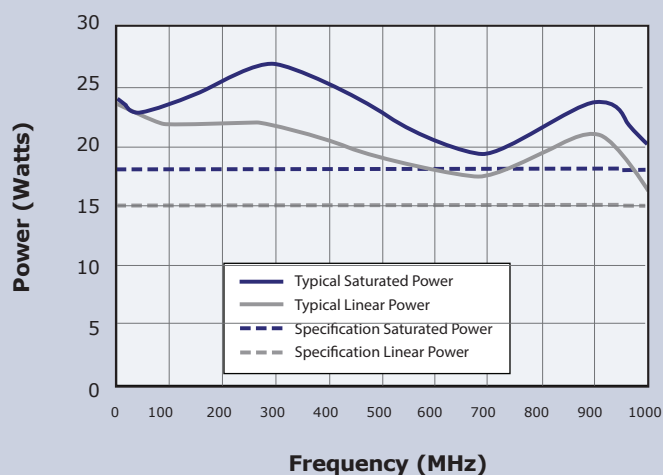
The **VBA1000-18** is a member of our family of 100kHz-1000MHz high power amplifiers, designed primarily for EMC applications.

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 transducer and test chamber requirements

Performance Chart



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

See overleaf for technical specification

Specifications

VBA1000-18

Electrical

Frequency Range (Instantaneous)	100kHz-1000MHz
Rated Output Power	18W Min (20W typical)
Output Power at 1dB Gain Compression	15W Min (18-23W typical)
Gain	44dB Min
Third Order Intercept Point (see note 1)	54dBm
Gain variation with Frequency	±3dB
Harmonics at 15W 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	<150VA (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, 3U Case, 440mm Deep
Mass	9kg
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



Designers and Manufacturers of Solid State RF and Microwave Amplifiers

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