VBA 2000-100
1000MHz-2000MHz 100W Amplifier

- Solid state TWT replacement.
- High reliability proven GaAs design
- Class A for maximum mismatch drive
- General linear power requirements

Product Description

The VBA 2000-100 is a member of our family of 1000MHz-2000MHz high power amplifiers, designed primarily for EMC applications.

Like all our products of the VBA 2000 series, it is based on our GaAs technology, offering the user the benefits of linearity, ruggedness and efficiency. With its compression point close to saturated output, it is equivalent to TWT amplifiers of twice the output power.

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.

Choose GaAs Class A for linearity, ruggedness, efficiency and cost.

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Vectawave Technology Limited

Technical Specification

Electrical	
Frequency Range (Instantaneous)	*1000-2000MHz*
Rated Output Power	*100W Min, 110W typical*
Output Power at 1dB Gain Compression	*90W Min, 100W typical*
Gain	*51dB Min*
Third Order Intercept Point (see note 1)	*60dBm*
Gain variation with Frequency	*±3dB*
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	*90-264V ac*
Supply Frequency Range	*47-63Hz*
Supply Power	*<1kVA (Max)*
Mains Connector	*IEC320 C20*
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, 6U case, 550mm deep*
Mass	*35kg*
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.

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