

# VBA1000-275

## 80MHz-1000MHz 275W Amplifier

**Vectawave**



- High reliability proven GaAs design
- Higher performance and efficiency than silicon alternatives
- Class A for maximum mismatch drive
- Test to IEC61000-4-3

The VBA1000-275 is a member of our family of 80-1000MHz high power amplifiers, designed primarily for EMC applications.

This amplifier is based on our unique GaAs technology, offering the user the benefits of high linearity, ruggedness and efficiency.

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.

The amplifier can be controlled from either the front panel or remote control via the Ethernet, USB and GPIB interfaces. The digital interface system manages enabling and disabling the amplifier, monitoring power levels, monitoring power supply health, communicating with the control computer and implementing electrical interlocks. The keypad and display interface is used for monitoring amplifier state, power levels, interlock states etc. and for configuration options.

**4TECT**

ООО «4ТЕСТ»

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# Technical Specification

## Electrical

<i>Frequency Range (Instantaneous)</i>	80-1000MHz
<i>Output Power at 3dB Gain Compression</i>	275W Min (350W typical 80-500MHz)
<i>Output Power at 1dB Gain Compression</i>	250W Min (300W typical 80-500MHz)
<i>Gain</i>	56dB Min
<i>Third Order Intercept Point (see note 1)</i>	64dBm
<i>Gain variation with Frequency</i>	±3dB
<i>Harmonics at rated linear power</i>	Better than -20dBc
<i>Output Impedance</i>	50 Ohms
<i>Stability</i>	Unconditional
<i>Output VSWR Tolerance (see note 2)</i>	Infinity:1
<i>Input VSWR</i>	2:1 (Max)
<i>Supply Voltage</i>	184-265V ac
<i>Supply Frequency Range</i>	45-63Hz
<i>Supply Power</i>	<2kVA (Max)
<i>Mains Connector</i>	IEC 320

## Mechanical

<i>RF Connector Style</i>	Type N Female
<i>Safety Interlock</i>	Dual input, S/C and/or O/C to Mute
<i>Communication Interface</i>	USB/GPIB/Ethernet and front panel display.
<i>Dimensions</i>	19 inch, 6U Case, 550mm deep
<i>Mass</i>	25kg
<i>Operating Temperature Range</i>	0-40°C
<i>Case Style Options</i>	Rack mount with Front or Rear panel connectors Bench mount with Front panel connectors

## Regulatory Compliance

<i>Conducted and Radiated Emissions</i>	EN61326 Class A
<i>Conducted and Radiated Immunity</i>	EN61326:2013 Table 1
<i>Safety</i>	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.

