

# VBA1000-600c

80 - 1000MHz 600W Amplifier

- High reliability proven GaAs design
- Class A for maximum mismatch drive
- Automotive testing
- General linear power requirements

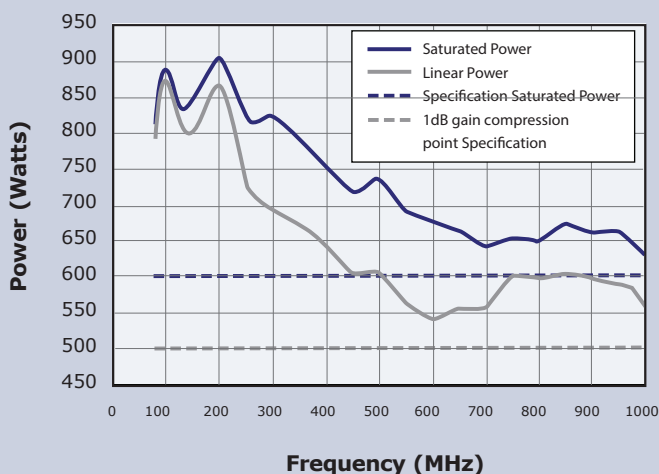


The **VBA1000-600c** is a member of our family of 80-1000MHz high power amplifiers, designed primarily for EMC applications.

Like all our products of the VBA1000 series, it is based on our unique GaAs technology, offering the user the benefits of 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.

## Performance Chart



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

**Electrical**

<b>Frequency Range (Instantaneous)</b>	80-1000MHz
<b>Rated Output Power</b>	600W 80-700MHz, 500W 700-1000MHz
<b>Output Power at 1dB Gain Compression</b>	500W 80-700MHz, 450W 700-1000MHz
<b>Gain</b>	58dB Min
<b>Third Order Intercept Point (see note 1)</b>	66dBm
<b>Gain variation with Frequency</b>	±3dB
<b>Harmonics at 500W Output Power</b>	-20dBc Max
<b>Output Impedance</b>	50 Ohms
<b>Stability</b>	Unconditional
<b>Output VSWR Tolerance (see note 2)</b>	Infinity any Phase
<b>Input VSWR</b>	2:1 (Max)
<b>Supply Voltage</b>	200-240V or 350-415V ac (see options for 3 phase configuration)
<b>Supply Frequency Range</b>	45-63Hz
<b>Supply Power</b>	<4kVA (Max)
<b>Mains Connector</b>	Appropriate IEC60309 plug (see options)

**Mechanical**

<b>RF Connector Style</b>	RF input N type, RF output 7/16
<b>Safety Interlock</b>	2 x BNC, S/C and O/C to Mute
<b>Communication Interface</b>	USB/GPIB/Ethernet and front panel display
<b>Dimensions</b>	19 inch 16U rack, 800mm deep
<b>Mass</b>	98kg
<b>Operating Temperature Range</b>	0-40°C
<b>Case Style Options</b>	Rack mount with rear panel connectors

**Regulatory Compliance**

<b>Conducted and Radiated Emissions</b>	EN61326 Class A
<b>Conducted and Radiated Immunity</b>	EN61326:2013 Table 1
<b>Safety</b>	EN61010-1

**Options**

- 3 Phase Delta (5 pin plug)
- 3 Phase Star (5 pin plug)

**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

