Vectawave
Technology Limited

VBA1000-600c

80 - 1000MHz 600W Amplifier

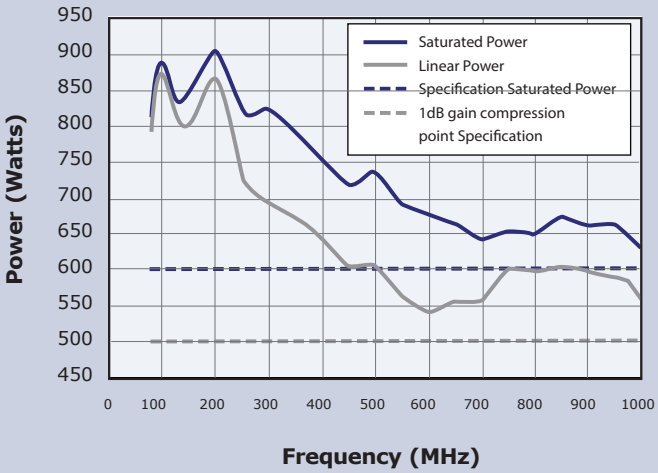
- **High reliability proven GaAs design**
- **Class A for maximum mismatch drive**
- **Automotive testing**
- **General linear power requirements**

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.

See overleaf for technical specification

Specifications VBA1000-600c

Electrical

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

Mechanical

RF Connector Style	RF input N type, RF output 7/16
Safety Interlock	2 x BNC, S/C and O/C to Mute
Communication Interface	USB/GPIB/Ethernet and front panel display
Dimensions	19 inch 16U rack, 800mm deep
Mass	98kg
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	EN61326:2013 Table 1
Safety	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

ACS REGISTRARS Quality Assurance ISO 9001 UKAS 229

Vectawave Technology Limited

Designers and Manufacturers of Solid State RF and Microwave Amplifiers

Represented Worldwide

Vectawave Technology Ltd.
Unit D, The Apex,
St Cross Business Park, Monks Brook,
Newport, Isle of Wight, PO30 5XW

Tel: +44 (0) 1983 821 818
E-mail: sales@vectawave.co.uk