

# VBA1000-450S

80 - 1000MHz 450W Amplifier

- Rugged push-pull Silicon LDMOS technology
- Class A for maximum mismatch drive
- General linear power requirements

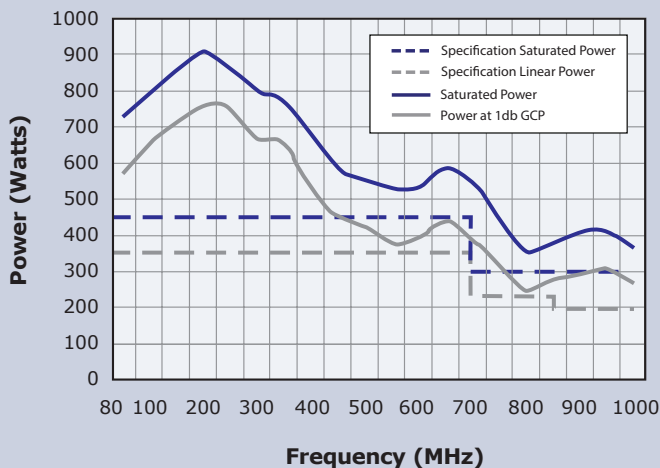
The **VBA1000-450S** is an 80-1000MHz high power amplifier, designed primarily for EMC applications.

The amplifier produces around 600W P1dB at the important VHF frequencies, and is housed in a compact 6U case. VBA1000-450S incorporates measures to improve power delivery into high VSWR loads.



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**



**See overleaf for technical specification**

**Electrical**

<b>Frequency Range (Instantaneous)</b>	80-1000MHz
<b>Rated Output Power</b>	450W 80MHz to <700MHz 300W ≥700MHz to 1000MHz
<b>Output Power at 1dB Gain Compression</b>	300W 80MHz to <700MHz 230W ≥700MHz to <900MHz 200W ≥900MHz to 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 250W Output Power</b>	Better than -20dBc
<b>Output Impedance</b>	50 Ohms
<b>Stability</b>	Unconditional
<b>Output VSWR Tolerance (see note 2)</b>	Infinity:1
<b>Input VSWR</b>	2:1 (Max)
<b>Supply Voltage</b>	100-240V ac (+/- 10%)
<b>Supply Frequency Range</b>	45-63Hz
<b>Supply Power</b>	<2kVA (Max)
<b>Mains Connector</b>	IEC320

**Mechanical**

<b>RF Connector Style</b>	Type N Female
<b>Safety Interlock</b>	Dual input, S/C and/or O/C to Mute
<b>Communication Interface</b>	USB/GPIB/Ethernet
<b>Dimensions</b>	19 inch, 6U Case, 500mm deep
<b>Mass</b>	23kg
<b>Operating Temperature Range</b>	0-40°C
<b>Case Style Options</b>	Rack mount with Front or Rear panel connectors Bench mount with Front panel connectors

**Regulatory Compliance**

<b>Conducted and Radiated Emissions</b>	EN61326 Class A
<b>Conducted and Radiated Immunity</b>	EN61326:1997 Table 1
<b>Safety</b>	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

**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