

VBA1000-450S

80 - 1000MHz 450W Amplifier

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

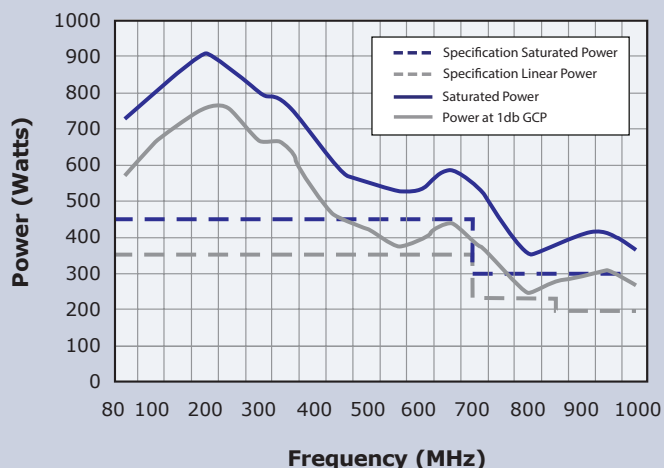
The **VBA1000-450S** is an 80-1000MHz high power amplifier, designed primarily for EMC applications.

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



Electrical

Frequency Range (Instantaneous)	80-1000MHz
Rated Output Power	450W 80MHz to <700MHz 300W ≥700MHz to 1000MHz
Output Power at 1dB Gain Compression	300W 80MHz to <700MHz 230W ≥700MHz to <900MHz 200W ≥900MHz to 1000MHz
Gain	58dB Min
Third Order Intercept Point (see note 1)	66dBm
Gain variation with Frequency	±3dB
Harmonics at 250W 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	100-240V ac (+/- 10%)
Supply Frequency Range	45-63Hz
Supply Power	<2kVA (Max)
Mains Connector	IEC320

Mechanical

RF Connector Style	Type N Female
Safety Interlock	Dual input, S/C and/or O/C to Mute
Communication Interface	USB/GPIB/Ethernet
Dimensions	19 inch, 6U Case, 500mm deep
Mass	23kg
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

