

VBA1000-45

10kHz – 1GHz 45W Amplifier

- Specialist GTEM cell driver
- Rugged push-pull MOSFET technology
- Class A for maximum mismatch drive
- General linear power requirements

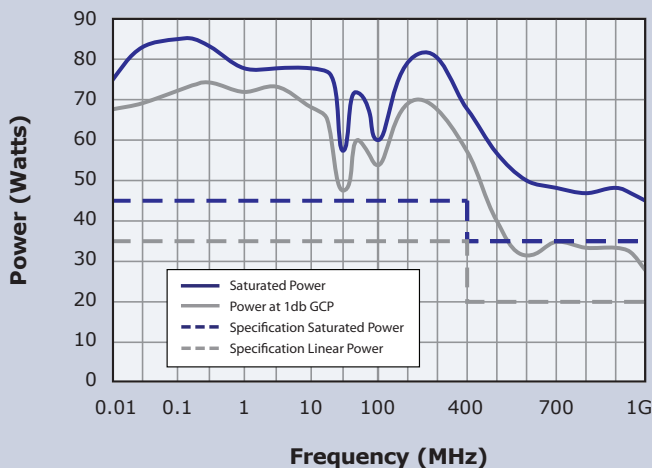
The **VBA1000-45** is an ultra broad-band high power amplifier operating over an instantaneous frequency range of 10kHz to 1GHz, designed primarily for EMC applications. It is particularly useful as a driver for GTEM cells and CDNs.

The design is based on latest generation push-pull LDMOS technology in the output stage, coupled with GaAs technology in the driver stages. It employs proprietary transmission network techniques, giving little degradation of output power up to the high frequency limit.



The amplifier operates in class A, the benefits for EMC applications being very low distortion and tolerance of 100% mis-match. Fold-back protection is neither fitted nor needed! This makes it supremely suited for very demanding transducer requirements

Performance Chart



Choose **Vectawave** for high efficiency and performance in your regular power amplifier requirements.

See overleaf for technical specification

Electrical

Frequency Range (Instantaneous)	0.01-1000MHz
Rated Output Power	0.01-400MHz 45W Min 400-1000MHz 35W Min
Linear Power at 1dB Gain Compression	0.01-400MHz 35W Min 400-1000MHz 20W Min
Gain	50dB Min
Third Order Intercept Point (see note 1)	57dBm
Gain variation with Frequency	±3dB Max
Harmonics at Minimum Linear 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	85-264V ac
Supply Frequency Range	47-63Hz
Supply Power	300VA (Max)

Mechanical

RF Connector Style	Type N Female
Safety Interlock	2 x BNC, S/C and O/C to Mute
USB/GPIB Interface	Optional
Mains Connector Style	IEC320
Dimensions	19 inch, 3U Case, 440mm Deep
Mass	13kg
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
Mains Harmonic Currents	EN61000-3-2
Voltage Fluctuations and Flicker	EN61000-3-3

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

