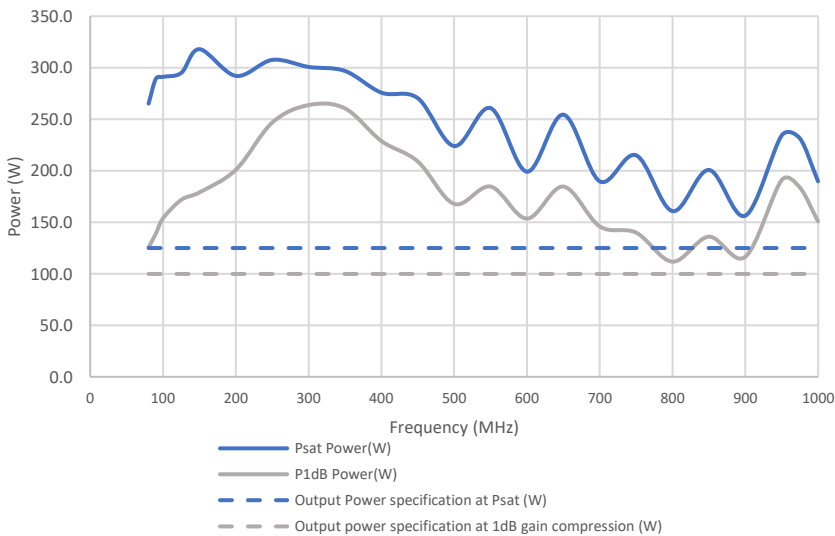


# VBA1000-125S

80MHz-1000MHz 125W Amplifier



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

The VBA1000-125S is a member of our family of 80-1000MHz high power amplifiers, designed primarily for EMC applications.

The amplifier is housed in a compact 4U case. VBA1000-125S incorporates measures to improve power delivery into high VSWR loads.

VBA1000-125S 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 remotely via the Ethernet, USB and GPIB interfaces. The digital interface system manages enabling and disabling the amplifier, monitoring power supply health, communicating with the control computer and implementing electrical interlocks.

# Technical Specification

## Electrical

Frequency Range (Instantaneous)	80-1000MHz
Output Power at 3dB Gain Compression	125W minimum
Output Power at 1dB Gain Compression	100W minimum
Gain	51dB Min
Third Order Intercept Point (see note 1)	60dBm
Gain variation with Frequency	±2dB
Maximum input power	+10dBm
Harmonics at Rated 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	100 - 240V ac (+/- 10%)
Supply Frequency Range	45-63Hz
Supply Power	<1kVA (Max)
Mains Connector	IEC320
Mechanical	
RF Connector Style	Type N Female
Safety Interlock	Dual input, S/C and/or O/C to Mute
Remote Control Interface	USB/GPIB/Ethernet
Dimensions	19 inch, 4U Case, 500mm deep
Mass	18kg
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	EN61326:2013 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.