

VBA3100-50

800MHz - 3.1GHz 50W Amplifier

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

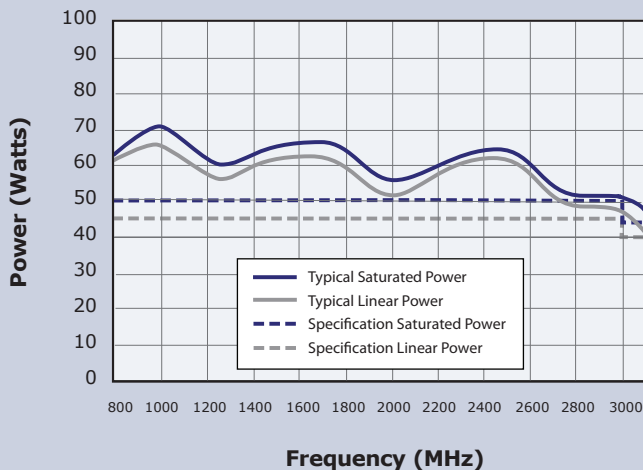
The **VBA3100-50** is a member of our family of 800MHz-3.1GHz high power amplifiers, designed primarily for EMC applications.

Like all our products of the VBA0830 series, it is based on our GaAs technology, offering the user the benefits of linearity, ruggedness and efficiency. With its compression point close to saturated output, it is equivalent to TWT amplifiers of twice the output power.



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.

Performance Chart



Choose **GaAs Class A** for linearity, ruggedness, efficiency and cost.

See overleaf for technical specification

Electrical

Frequency Range (Instantaneous)	800-3100MHz
Rated Output Power	50W Min, 55W typical (800MHz-3.0GHz) 45W Min, 50W typical (3.0GHz-3.1GHz)
Output Power at 1dB Gain Compression	45W Min, 50W typical (800MHz-3.0GHz) 40W Min, 45W typical (3.0GHz-3.1GHz)
Gain	48dB Min
Third Order Intercept Point (see note 1)	57dBm
Gain variation with Frequency	±2dB
Harmonics at 45W Output Power (800MHz-3.0GHz)	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	<500VA (Max)
Mains Connector	IEC320

Mechanical

RF Connector Style	Type N Female
Safety Interlock	2 x BNC, S/C and O/C to Mute
USB/GPIB Interface	Optional
Dimensions	19 inch, 4U Case, 550mm Deep
Mass	20kg
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



vectawave
BROADBAND POWER

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

Fax: +44 (0) 1983 532 737

E-mail: sales@vectawave.co.uk