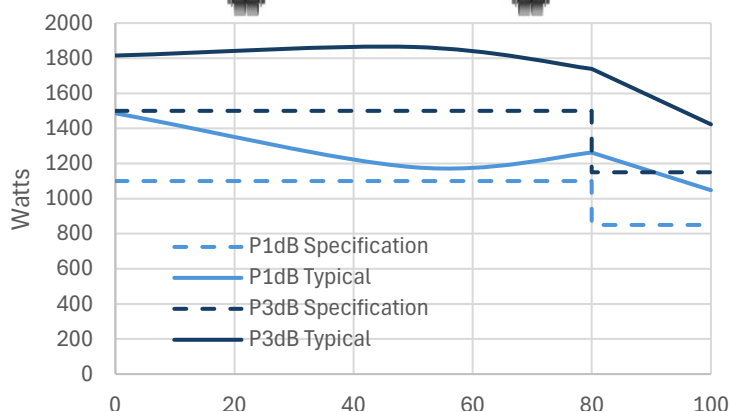




VBA100-1500A

10kHz-100MHz 1.5kW Amplifier



Vectawave

- Rugged push-pull MOSFET technology
- **Class A** for maximum mismatch drive
- High efficiency proprietary combiner design

The VBA100-1500A is a 10kHz-100MHz high power amplifier designed for applications where a rugged Class A mismatch tolerant amplifier is required.

The amplifier is based on high performance silicon push-pull MOSFET output stages and utilizes exclusive power combining techniques, minimizing loss for a more efficient solution. 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.

The amplifier operates in class A, with very low distortion and tolerance of 100% mismatch without foldback. See overleaf for technical specification.

Technical Specification

Electrical	
Frequency Range (Instantaneous)	10kHz-100MHz
Rated Output Power	1500W 10kHz – 80MHz 1150W 80MHz – 100MHz
Output Power at 1dB Gain Compression	1100W 10kHz – 80MHz 850W 80MHz – 100MHz
Gain	63dB Min
Third Order Intercept Point <small>(see note 1)</small>	69dBm
Gain variation with Frequency	±3dB
Harmonics at rated linear power	Better than -20dBc
Output Impedance	50 Ohms
Stability	Unconditional
Output VSWR Tolerance <small>(see note 2)</small>	Infinity any phase
Input VSWR	2:1 (Max)
Supply Voltage	3 phase 200-240V or 350-415V ac
Supply Frequency Range	47-63Hz
Supply Power	6kVA
Mains Connector	IEC60309 plug (see options)
Mechanical	
RF Connector Style	Input type N female, output 7/16 female
Safety Interlock	2 x BNC, S/C and O/C to mute
Communication Interface	USB/GPIB/Ethernet
Dimensions	16U Rack, 800mm deep
Mass	150kg
Operating Temperature Range	0-40°C
Case Style Options	Rack Mount with rear panel connectors
Regulatory Compliance	
Conducted and Radiated Emissions	EN61326 Class A
Conducted and Radiated Immunity	EN61326:2013 Table 1
Safety	EN61010-1
Options	3 Phase delta connection (No neutral, 4 pin plug) 3 Phase star connection (With Neutral, 5 pin plug)

- 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.

