VBA1060-200

1000MHz-6000MHz 200W Amplifier



For illustration only

ectawave

Class A for maximum mismatch drive

GaN technology

- Featuring high efficiency proprietary Quadrature Hybrid designs
- Dual coupled sample ports

The VBA1060-200 is a 1000-6000MHz 200W high power amplifier designed for applications where a rugged Class A mismatch tolerant amplifier is required. The amplifier is based on high performance extra wideband GaN output stages and utilizes Vectawave proprietary Quadrature Hybrid 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. Forward and reflected power sample ports are accessible via the rear panel.

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) 1000-6000MHz

Rated Output Power 200W

Output Power at 1dB Gain

Compression

170W

Gain 54dB Min
Third Order Intercept Point (see note 1) 64dBm

Gain variation with Frequency ±3dB

Harmonics at rated linear power Better than -20dBc

Output Impedance 50 Ohms
Stability Unconditional
Output VSWR Tolerance (see note 2) Infinity any phase

Input VSWR 2:1 (Max)

Supply Voltage 100-240Vac (+/- 10%)

Supply Frequency Range 45-63Hz

Supply Power <3kVA

Mains Connector IEC320 – C20

Mechanical

RF Connector Style Input type N female, output N female

Sample ports Forward N type female, Reverse N type female

Safety Interlock 2 x BNC, S/C and O/C to mute

Communication Interface USB/GPIB/Ethernet

Dimensions 9U Rack, 600mm deep

Mass 40kg
Operating Temperature Range 0-40°C

Case Style Options Rack Mountable with rear panel connectors

Regulatory Compliance

Conducted and Radiated EN61326 Class A

Emissions

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.



