VBA3200-450

700-3200MHz 450W Amplifier





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

The VBA3200-450 is a 700-3200MHz high power amplifier, designed primarily for EMC applications. 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.

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.



Technical Specification

Electrical

Frequency Range (Instantaneous) 700-3200MHz

Rated Output Power 450W Min

Output Power at 1dB Gain

Compression

400W Min

57dB Min

Gain

Third Order Intercept Point (see

66dBm

Gain variation with Frequency

±3dB

Harmonics at 400W Output Power

Output VSWR Tolerance (see note 2)

Better than -20dBc

Output Impedance

50 Ohms

Stability

note 1)

Infinity:1

Input VSWR

2:1 (Max)

Unconditional

Supply Voltage

200-240V or 350-415V ac

Supply Frequency Range

45-63Hz

Supply Power

<4kVA (Max)

Mains Connector

IEC 60309 plug (see Options)

Mechanical

RF Connector Style

Safety Interlock

Input Type N Female, Output 7-16 Female

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

Remote Control Interface

USB/GPIB/Ethernet

Dimensions

19 inch, 34U Rack, 800mm deep

Mass

200kg

Operating Temperature Range

0-40°C

Options

3 Phase Delta (5 pin plug)

3 Phase Star (5 pin plug)

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.



