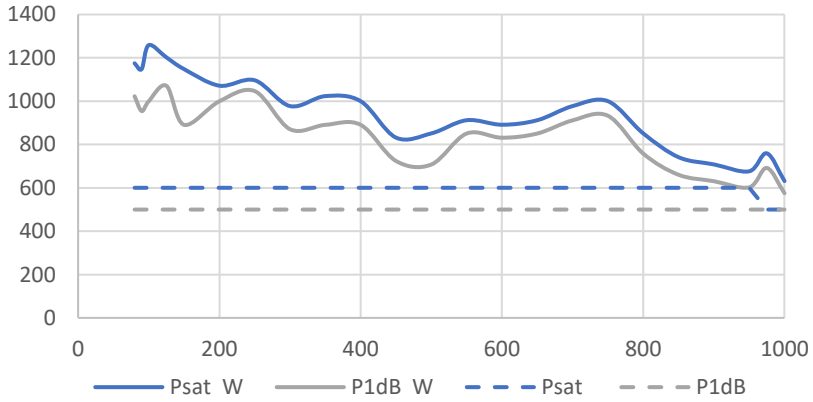
VBA1000-600s

80MHz-1000MHz 600W Amplifier

Typical Performance



- Rugged push-pull Silicon LDMOS technology
- Class A for maximum mismatch drive
- Linear power

The VBA1000-600s is a member of our family of 80-1000MHz high power amplifiers, designed primarily for EMC applications.
It is based on Silicon LDMOS technology, offering the user the benefits of high linearity, ruggedness and efficiency. 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, implementing electrical interlocks and has comprehensive diagnostic functions. The keypad and display interface is used for monitoring amplifier state, power levels, interlock states etc. and for configuration options.

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Technical Specification

Electrical	
Frequency Range (Instantaneous)	80-1000MHz
Saturated Power	600W 80-950MHz, 500W 950-1000MHz
Output Power at 1dB Gain Compression	500W 80-1000MHz,
Gain	58dB Min
Third Order Intercept Point (see note 1)	66dBm
Gain variation with Frequency	±3dB
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 power required for min 500W output	0dBm
Input VSWR	1.5:1 (Max)
AC Supply	200-240Vac single phase
Supply Frequency Range	45-63Hz
Supply Power	<3kVA (Max)
Mains Connector	IEC60309 plug
Mechanical	
RF Connector Style	RF input Type N Female, RF output 7/16
Safety Interlock	Dual input, S/C and/or O/C to Mute
Remote Control Interface	USB/GPIB/Ethernet
Dimensions	19 inch, 16U Rack, 800mm deep
Mass	98kg
Operating Temperature Range	0-40°C
Case Style	Rack with Rear 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.