

## 1000VA Sine Wave Output Variable AC Power Source Rugged, Industrial Quality VFC 1K Series

- Variable output voltage and frequency
- Electronic power factor correction (PFC)
- Sinusoidal output voltage
- Digital meters for output voltage and frequency
- Isolated, floating output
- 1000VA output power
- Full electronic protection
- Field-proven design topology



The VFC 1K Series is a variable AC power source with an adjustable output of 0 ... 132Vrms (maximum current 8Arms) and 0...264Vrms (maximum current 4Arms). The unit uses PWM technology to generate a 1000VA sine-wave output with a total harmonic distortion less than 5% at full load. The input is power factor corrected. The output frequency is adjustable from 40 to 440Hz. The VFC 1K Series AC power source is suitable for a diverse range of industrial, engineering and academic or laboratory applications. It can also be used as an AC frequency converter. The unit is fan cooled and features full electronic protection, high efficiency and low output noise. The use of components with established reliability results in a high demonstrated MTBF. The VFC 1K is manufactured at our plant under strict quality control. Customized versions are also available.

### SPECIFICATIONS

<p><b>Input Voltage</b> Universal 95 ... 264Vac 47 - 410Hz Input current 12A rms max.</p>	<p><b>Output Voltage</b> 0...132Vrms range; max current 8Arms 0...264Vrms range; max current 4Arms</p>	<p><b>Output Overload Protection</b> Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling Hiccup at approx. 120% of output max. current</p>	<p><b>MTBF</b> Min. 95,000 hours at 45°C Demonstrated MTBF is significantly higher. Fans excluded</p>
<p><b>Power Factor</b> Min. 0.97 at full load for the entire input range. Meets EN61000-3-2</p>	<p><b>Output frequency</b> 40 ...440Hz in one band 1Hz step 50, 100, 200, 400Hz 'hot' push buttons</p>	<p><b>Output Overvoltage Protection</b> 140Vac in low range and 280Vac in high range by internal supply voltage limiting</p>	<p><b>Indicators</b> Digital meters for output voltage and frequency</p>
<p><b>Input Protection</b> Inrush current limiting Varistors Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p>	<p><b>Frequency Stability</b> ± 0.1%</p>	<p><b>Efficiency</b> Typically 80% at full load</p>	<p><b>Control Input</b> Switch ON/OFF Frequency Up/down buttons Frequency Pre Select buttons Voltage Up/down buttons Remote shutdown as option</p>
<p><b>Input Isolation</b> 2250VDC input to chassis 2250 VDC input to output 8mm spacing 2250VDC output to chassis</p>	<p><b>Output Wave Form</b> Sinusoidal</p>	<p><b>Operating Temperature Range</b> 0° C to +50° C for full specification without derating.</p>	<p><b>Alarm Output</b> None</p>
<p><b>Standards</b> Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950</p>	<p><b>Total Harmonic Distortion</b> Less than 5% at full load</p>	<p><b>Temperature Drift (for output voltage level)</b> 0.05% per °C over operating temperature range</p>	<p><b>Dimensions</b> 3U x 19" x 18" enclosed case Black</p>
<p><b>EMI</b> EN 55022 Class A as a minimum</p>	<p><b>Line/Load Regulation</b> Maximum ± 5% of Vout max from no load to full load</p>	<p><b>Cooling</b> Built-in fans drawing air into the unit</p>	<p><b>Weight</b> 14 kg (31 lb)</p>
	<p><b>Load Crest Factor</b> Maximum 3.0 at 90% load</p>	<p><b>Environmental Protection</b> Basic ruggedizing Full ruggedizing and conformal coating as option</p>	<p><b>Connections</b> Input: terminal block Output: binding posts on front panel AC receptacle on rear panel optional</p>
	<p><b>Output Ripple/Noise</b> High frequency ripple is less than 500mVrms (20 MHz BW)</p>	<p><b>Humidity</b> 5 - 95% non-condensing</p>	<p><b>RoHS Compliance</b> Fully compliant</p>
			<p><b>Warranty</b> Two years subject to application within good engineering practice</p>

**Enhancements to these general specifications can be accommodated upon request. Specifications are subject to change**

*Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-proved Facility.*



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