

1,200W Rugged, Industrial AC/DC Power Supply

HBC 1K2 Series



- Rugged, industrial quality
- Fan cooling
- Full electronic protection
- Field-proven design topology

The HBC 1K2 series rugged, industrial quality AC/DC power supply uses field-proven internal modules to generate 1,200W output power. It is a mature design with a track record in numerous applications. Cooling is by a built-in fan, with additional conduction via the baseplate. The unit has full electronic protection. The input and output are filtered for low noise. Low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. Additional ruggedizing and conformal coating are available for operation in mobile applications. It is manufactured at our plant under strict quality control. The chassis has four M6 PEM nuts for mounting on the bottom surface. Power factor corrected versions, the PFC 1K and PFC 1K5, are also available.

SPECIFICATIONS

<p>Input Voltage 115/230VAC \pm 15% Selectable by internal jumper 47 - 63Hz Input current 22Arms max at 95V</p>	<p>Output Voltages 24V/50A, 48V/25A or 125V/9A are standard Output is floating, either terminal can be grounded Consult factory for other voltages</p>	<p>Efficiency Min 80% at full load</p>	<p>Indicators None</p>
<p>Input Protection Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p>	<p>Redundancy Diode Not installed Available as option</p>	<p>Operating Temperature 0° C to +50° C for full specification without derating. Extended temperature ranges available.</p>	<p>Control Input None</p>
<p>Input Isolation 2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis</p>	<p>Line/Load Regulation \pm1% combined from zero load to full load.</p>	<p>Temperature Drift 0.03% per ° C over operating temperature range</p>	<p>Alarm Output None Available as option</p>
<p>Standards Designed to meet EN60950 and corresponding UL and CSA standards</p>	<p>Dynamic Response Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</p>	<p>Cooling Forced air by built-in fans and additional cooling via base plate</p>	<p>Dimensions (W x H x L) U5512: 127 x 127 x 315 mm (5" x 5" x 12.42") enclosed case Mounting by four M6 screw ports on the bottom surface</p>
<p>EMI Meets and EN 55022 Class A with margins</p>	<p>Output Ripple Noise Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)</p>	<p>Environmental Protection Basic ruggedizing Heavy ruggedizing and conformal coating as option</p>	<p>Weight 5.2 kg (11.5 lb.)</p>
<p>Switching Frequency 55kHz +/- 3kHz</p>	<p>Output Overload Protection Rectangular current limiting with short circuit protection Thermal shutdown with automatic reset in case of insufficient airflow</p>	<p>Shock/Vibration IEC 61373 Cat 1 A&B</p>	<p>Connections Input: terminal blocks Output: Terminal block or threaded studs</p>
<p>Hold-up Time Min. 5msec at nominal input</p>	<p>Output Overvoltage Protection Double regulator loop</p>	<p>Humidity 5 - 95% non-condensing</p>	<p>RoHS Compliance Fully compliant</p>
		<p>MTBF 110,000 hours at 45° C (Fan excluded) Demonstrated MTBF is significantly higher</p>	<p>Warranty Two years subject to application within good engineering practice</p>

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications 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-approved Facility.



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