

2500W, Rugged, Industrial Quality DC/DC Converter BAP 2K5 Series

- Rugged industrial quality
- Field-proven design in a wide range of applications
- Single low noise output
- Fan cooling
- Full electronic protection
- Modular



3U3 chassis



3U4 chassis

Mechanical size depends on input/output configuration.

The BAP 2K5 Series rugged, industrial quality DC/DC converter uses a field proven technology to generate up to 2500W, depending on input/output combination. It is a mature design with a track record in numerous applications. The unit is built with internal modules. Built-in fans provide sufficient airflow for operation without de-rating to the specified temperature. Full electronic protection eliminates failure due to abnormal operational conditions, including application errors. The input and output are filtered for low noise. Low component count, large design headroom, and the use of components with established reliability result in a high MTBF. Options include a Form C output fail alarm and remote shutdown. Additional ruggedizing and conformal coating are available for applications that require high immunity to shock, vibration and humidity. The series is manufactured at our plant under strict quality control.

SPECIFICATIONS

<p>Input Voltage 24Vdc (21-30V) 48Vdc (42-60V) 125Vd (105-145V) Other inputs on request</p> <p>Input Protection Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p>Input Isolation Depends on the required input/output combination At minimum: 1000VDC input to chassis, 1500VDC input to output, 500VDC output to chassis</p> <p>Standards Designed to meet EN60950 and related UL & CSA standards</p> <p>EMI EN 55022 Class A as minimum</p> <p>Switching Frequency 55kHz +/- 3kHz</p>	<p>Output Voltage 24V/104A, 36V/69A, 48V/52A, 72V/34A, 96V/26A or 125V/20A are standard Output is floating, either terminal can be grounded Other outputs on request</p> <p>Redundancy diode Optional</p> <p>Line/Load Regulation +/- 1% combined from 10% load to full load including output diode</p> <p>Dynamic Response Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</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>Overload Protection Rectangular current limiting with short-circuit protection(no hiccup) Thermal shutdown in case of insufficient cooling (self -resetting)</p> <p>Output Overvoltage Protection Second regulator loop. Second loop completely stable and independent of main regulator loop</p>	<p>Efficiency Typically 85% at full load depending on input/output combination</p> <p>Operating Temperature 0°C to +50°C for full specification Extended temperature range available</p> <p>Temperature Drift 0.03% per °C over operating temperature range</p> <p>Cooling Forced air by two built-in fans and conduction to customer heatsink or chassis</p> <p>Environmental Protection Basic ruggedizing Optional heavy ruggedizing and conformal coating is available</p> <p>Shock/Vibration IEC 61373 Cat 1 A&B</p> <p>Humidity 5 - 95% non-condensing</p> <p>MTBF 130,000 hours @ 45 °C (fans not included) Demonstrated MTBF is significantly higher.</p>	<p>Indicators None</p> <p>Control Input Optional</p> <p>Alarm Outputs None on standard version Output Fail Alarm (Form C) as option</p> <p>Package/Dimensions (WxHxL) Package varies from 3U3 chassis to a 3U4 chassis, depending on input/output combination required.</p> <p>Weight 3U3: 6 kg (13 lb) 3U4: 8 kg (18 lb)</p> <p>Connections Depends on input/output combination</p> <p>RoHS Compliance Fully compliant</p> <p>Warranty Two years subject to application within good engineering practice</p>
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Enhancements to these general specifications can be accommodated upon request. Specifications are subject to change.

Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility

