

500W, Rugged, Industrial Quality DC/DC Converter BAP 319-FT Series



- Rugged industrial quality
- Regulated and adjustable output
- Full electronic protection
- Field-proven design in a wide range of applications
- N+1 redundancy available as option
- Plug-in (Eurocard) version available

The BAP 319 Series rugged, industrial quality DC/DC converter uses field-proven topology to generate 500W output power, or 600W if forced air is available. For 700W output power, see the BAP 319F version with built-in fans. This is a mature design with a track record in hundreds of applications. Cooling is via base plate to a heat-sinking surface and by natural convection. Full electronic protection, low component count, large design headroom, and the use of components with established reliability result in a high MTBF. An optional built-in redundancy diode allows for parallel and N+1 operation. Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration and humidity. The series is manufactured at our plant under strict quality control.

SPECIFICATIONS

<p>Input Voltage 24Vdc (21-29V) 48Vdc (42-56V) 125Vdc (105-145V) (12Vdc input with reduced power) Consult factory for other voltages</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>Isolation According to input voltage minimum of: 1000VDC input to chassis, 1500VDC input to output, 500VDC output to chassis</p> <p>Standards Designed to meet EN60950 and related standards.</p> <p>EMI EN 55022 Class A as a minimum</p> <p>Switching Frequency 80KHz +/- 5KHz</p>	<p>Output Voltages 12V, 24V, 48V or 125Vdc Consult factory for other voltages</p> <p>Redundancy diode Available as option</p> <p>Line/Load Regulation ± 1% combined from zero load to full load</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% Vrms (20MHz BW)</p> <p>Output Overload Protection Rectangular current limiting with hiccup mode short-circuit protection. Thermal shutdown in case of insufficient cooling (self resetting)</p> <p>Output Overvoltage Protection Double regulator loop completely stable and independent of main loop</p>	<p>Efficiency Typically 80% at full load depending on input/output combination</p> <p>Operating Temperature Range 0°C to 50°C cold plate temperature for full specification without derating Extended temperature ranges available</p> <p>Temperature Drift 0.03% per °C over operating temperature range</p> <p>Cooling Conduction via base plate and convection</p> <p>Environmental Protection Basic ruggedizing Heavy ruggedizing and conformal coating as option</p> <p>Shock/Vibration IEC 61373 Cat 1 A&B</p> <p>Humidity 5 - 95% non-condensing</p> <p>MTBF 160,000 hours at 45°C Demonstrated MTBF is significantly higher</p>	<p>Indicators None Available as option</p> <p>Control Input None on standard version Available as option</p> <p>Alarm Output None Available as option</p> <p>Package/Dimensions (W x H x L) F4: 130 x 64 x 353 mm (5.1 x 2.5" x 13.9) including terminal block and flanges. Mounting holes are clear</p> <p>Weight 2.2 kg (4.9 lb)</p> <p>Connections 12-pole barrier type terminal block, 3/8" spacing</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 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



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