

## 150W, Rugged DC/DC Industrial Converter BAP 150-FT Series



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

This rugged, industrial quality DC/DC converter uses field-proven topology to generate 150W output power. It is a simpler version of the field proven BAP 180 series with cycling type overload protection. Cooling is via baseplate to a heatsinking surface and by natural convection. 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. It is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

Any single DC input from 12V to 125Vdc  
Consult factory for other voltages

#### Input Protection

Inrush current limiting  
Varistor  
Reverse polarity protection  
Internal safety fuse  
Lower voltage than the specified minimum input will not damage the unit

#### Isolation

According to input voltage minimum of:  
1000VDC input to chassis,  
1500VDC input to output,  
500VDC output to chassis

#### Standards

Designed to meet EN60950 and related standards.

#### EMI

EN 55022 Class A as a minimum

#### Switching Frequency

80KHz +/- 5KHz

#### Output Voltages

Any single DC output from 12V to 125Vdc (150W)  
Consult factory for other voltages

#### Redundancy diode

Available as option

#### Line/Load Regulation

± 1% combined from zero load to full load

#### Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

#### Output Ripple / Noise

Better than 1% of output voltage peak to peak or 0.2% Vrms (20MHz BW)

#### Output Overload Protection

Rectangular current limiting with hiccup mode short-circuit protection.  
Thermal shutdown in case of insufficient cooling (self resetting)

#### Output Overvoltage Protection

Double regulator loop completely stable and independent of main loop

#### Efficiency

Typically 85% at full load depending on input/output combination

#### Operating Temperature Range

0 to + 60°C cold plate temperature for full specification  
Extended temperature ranges available

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Conduction via base plate and convection

#### Environmental Protection

Basic ruggedizing  
Conformal coating as option

#### MTBF

160,000 hours at 45 °C  
Demonstrated MTBF is significantly higher

#### Indicators

Green 'Output ON LED' visible through cooling slots

#### Control Input

None

#### Alarm Output

None on standard version  
Form C available as option

#### Package/Dimensions (W x D x H)

F1: 112 x 51 x 201 mm (4.4" x 2" x 7.9") including terminal block and flanges.  
Mounting holes are clear

#### Weight

0.74 kg (1.64 lb)

#### Connections

9-pole barrier type terminal block, 3/8" spacing.

#### RoHS Compliance

Fully compliant

#### Warranty

Two years subject to application within good engineering practice

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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