

100W, Rugged, Industrial Quality DC/DC Converter with Wide Input Range DCW 100-FT Series



- Rugged industrial quality
- Conduction/convection cooled
- Full electronic protection
- Field-proven design in a wide range of applications
- Wide input ranges

The DCW 100 Series rugged, industrial quality DC/DC converter uses a field proven technology to generate 100W output power. It is a mature design with a track record in numerous applications. Cooling is by conduction via base-plate to a heat-sinking surface and by natural convection. Low component count, large design headroom and the use of components with established reliability results in a high demonstrated MTBF. Optional heavy ruggedizing and conformal coating provide additional immunity to shock, vibration and moisture. This chassis-mount design is also optimized for cost efficiency. Open-frame versions with a 3" x 5" printed circuit board and 1.5" heat-sink block height are also available on request. The DCW 100 is manufactured at our plant under strict quality control.

SPECIFICATIONS

<p>Input Voltage Two standard input ranges are available: 20 - 60Vdc or 65 - 160Vdc Consult factory for other input voltages and ranges</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 1500VDC input to chassis, 1500VDC input to output, 500VDC output to chassis</p> <p>Standards Designed to meet EN 60950 and corresponding UL and CSA standards</p> <p>EMI EN55022 Class A with margins</p> <p>Switching Frequency 47kHz +/- 2kHz</p>	<p>Output Voltage/Current 12V/8A, 24V/4A, 48V/2A or 125V/0.8A are standard. Consult factory for other voltages</p> <p>Redundancy Diode Not installed</p> <p>Line/Load Regulation +/- 1% combined from no 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% RMS of the output voltage (20MHzBW)</p> <p>Output Overload Protection Current limiting with short circuit protection (hiccup)</p> <p>Output Overvoltage Protection Double regulator loop and transorb clamp</p>	<p>Efficiency Output voltage dependent. Typically 80% at full load</p> <p>Operating Temperature Range 0°C to 50°C for full specification Wider temperature ranges available.</p> <p>Temperature Drift 0.03% per °C over operating temperature range</p> <p>Cooling Conduction via base plate to customer heatsink or chassis and/or natural 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 150,000 hours @ 45 °C Demonstrated MTBF is significantly higher</p>	<p>Indicators None</p> <p>Control Input None</p> <p>Alarm Output None</p> <p>Package/Dimensions (W x H x L) F0: 94 x 48 x 160 mm (3.7" x 1.9" x 6.3") including terminal block and flanges. Mounting holes are clear</p> <p>Weight 0.55kg (1.2lbs)</p> <p>Connections 6-pole barrier-type terminal block or 90° header pins with 0.156" spacing Open PCB versions are also available with header pins with 0.156 spacing, or terminal block PCB size: 3"x 5"</p> <p>RoHS Compliance Fully compliant</p> <p>Warranty 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 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



ABOPULSE ELECTRONICS LTD
110 Walgreen Road, Ottawa
Ontario. K0A 1L0. CANADA
Tel: (613) 836-3511 Fax: (613) 836-7488
E-mail: absopulse@absopulse.com
<http://www.absopulse.com>