

150W, Rugged, Wide Input Range DC/DC Converter DCW 150 and DCW 150-110 Series



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

The DCW 150 Series rugged, industrial quality DC/DC converter use a field proven topology to generate 150W output power. It is a mature design with a track record in numerous applications. This design is also optimized for cost efficiency. The use of components with established reliability results in a high demonstrated MTBF. The series has large design headroom and is rated for operation over a wide temperature range without derating. It is cooled by conduction via baseplate to a heatsinking surface and by natural convection. Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration and humidity. The DCW 150 is manufactured at our plant under strict quality control.

SPECIFICATIONS

<p>Input Voltage 20V - 60Vdc or 65V – 160Vdc</p>	<p>Output Voltage/Current 12V/12A, 24V/6A; 48V/3A, 110V/1.3A or 125V/1.2A Consult factory for other voltages</p>	<p>Efficiency Output voltage dependent. Typically 80% at full load</p>	<p>Control Input None</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>Redundancy Diode None on this series</p>	<p>Operating Temperature Range 0 to +50°C. Higher rating depends on available conduction and convection.</p>	<p>Alarm Output None</p>
<p>Isolation 1500VDC input to chassis, 1500VDC input to output, 500VDC output to chassis</p>	<p>Line/Load Regulation +/- 1% combined from no load to full load</p>	<p>Temperature Drift 0.03% per °C over operating temperature range</p>	<p>Packaging/Connections/Weight: <u>Open PCB version:</u> PCB size 4" x 6.4" (105mm x 162mm) Barrier-type terminal block or Connector: H15 DIN Weight: 0.384 kg (0.85 lb)</p>
<p>Standards Designed to meet EN 60950 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 Conduction to customer heatsink or chassis and natural convection</p>	<p><u>Enclosed case version (F1):</u> 112 x 51 x 201 mm (4.4" x 2" x 7.9") including terminal block and flanges. Mounting holes are clear 9-pole barrier-type terminal block or Connector: H15 DIN Weight: 0.8 Kg (1.8 lb)</p>
<p>EMI Each version meets the requirements of EN55022 Class A with wide 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 Conformal coating as option</p>	<p><u>Plug-in Module version (E1):</u> Eurocard: 3U x 160mm x 10HP Connector: H15 DIN</p>
<p>Switching Frequency 47kHz +/- 2kHz</p>	<p>Output Overload Protection Current limiting with short circuit protection (hiccup mode)</p>	<p>Humidity 5 – 95% non-condensing</p>	<p>RoHS Compliance Fully compliant</p>
	<p>Output Overvoltage Protection Double regulator loop and transzorb clamp</p>	<p>MTBF 150,000 hours @ 45 °C Demonstrated MTBF is significantly higher</p>	<p>Warranty Two years subject to application within good engineering practice</p>
		<p>Indicators Green output ON LED visible through the cooling slots</p>	

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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