

150W, Rugged, Industrial Quality DC/DC Converter with Wide Input Range DCW 150-FT Series



- Rugged industrial quality
- Field-proven design
- Conduction/convection cooled
- Full electronic protection
- Wide input ranges

This rugged, industrial quality DC/DC converter uses field proven topology to generate 150W output power. It is a mature design with a track record in hundreds of applications. This chassis-mount design is also optimized for cost efficiency. Cooling is via baseplate to a heat-sinking surface and by natural convection. Additional ruggedizing and conformal coating are available for applications that require higher immunity to shock, vibration and humidity. Low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. The DCW 150 is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

Two standard input ranges are available:
20 - 60Vdc or 65 - 160Vdc
Consult factory for other input voltages and ranges

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

1500VDC input to chassis,
1500VDC input to output,
500VDC output to chassis

Standards

Designed to meet EN 60950 and related standards

EMI

EN55022 Class A with margins

Switching Frequency

55kHz +/- 3kHz

Output Voltage

12V, 24V, 48V or 125Vdc
Consult factory for other voltages

Redundancy diode

Not installed
Available as option

Line/Load Regulation

+/-1% combined

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% RMS of the output voltage (20MHz BW)

Overload Protection

Current limiting with short circuit protection (hiccup type)
Thermal shut-down with automatic recovery in case of insufficient cooling.

Output Overvoltage Protection

Double regulator loop

Efficiency

Output voltage dependent
Typically 80% at full load

Operating Temperature

0°C to 50°C for full specification
Wider temperature ranges available

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Conduction to customer heatsink or chassis and natural convection

Environmental Protection

Basic ruggedizing
Optional heavy ruggedizing and conformal coating is available

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 95% non-condensing

MTBF

140,000 hours @ 45°C
Demonstrated MTBF is significantly higher

Indicators

Green "Power ON" LED, visible through the cooling slots

Control Input

None

Alarm Outputs

Optional Form C alarm

Package/Dimensions (W x H x L)

F1: 114 x 51 x 201mm
(4.5" x 2" x 7.9") including terminal block and flanges
Mounting holes are clear

Weight

0.8kg (1.8 lbs)

Connections

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

RoHS

Fully compliant

Warranty

Two years subject to application within good engineering practice

Enhancements to these general specifications can be accommodated upon request. Designed to meet common approval requirements

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



ABSOPULSE ELECTRONICS LTD

110 Walgreen Road, Ottawa, Ontario. K0A 1L0. CANADA

Tel: +1-613-836-3511 | Fax: +1-613-836-7488

E-mail: absopulse@absopulse.com | <http://www.absopulse.com>

For further information, please see:

http://www.absopulse.com/Absopulse_DC_DC_Converters.php

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Made in Canada