



## DCCW150 DC/DC CONVERTER

### SERIES DCCW150

The DCCW150 Series rugged, industrial quality DC/DC converter uses a field proven technology to generate 150W output power.

It is a mature design with a track record in numerous applications.

Cooling is by conduction via baseplate. Additional cooling is achieved by natural convection through the cooling slots.

All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate.

This also provides exceptional mechanical ruggedness.

Conformal coating provides protection against humidity and airborne contaminants.

An optional built-in redundancy diode allows for parallel and N+1 operation. A Form C output fail alarm is available on request.

Full electronic protection, low component count, large design headroom and the exclusive use of components with established reliability contribute to a high MTBF. The unit is manufactured at our plant under strict quality control.

Customized versions are also available.



High frequency technology



Light weight, compact size



Full electronic protection



Conduction Cooling (no Fan)



Optional Extended temperature range



Optional Output fail alarm (Form C)

### APPLICATIONS

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

### FEATURES

- Field-proven converter topology
- Wide input range: 20-60Vdc or 65-160Vdc
- Custom inputs available upon request
- Designed to meet EN60950 safety
- Double regulator overvoltage protection
- Overload protection
- Inrush current limiting
- Convection / conduction cooled no fan
- Single output
- Custom outputs available
- Designed for heavy industrial and other harsh environment applications

# 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
Switching Frequency	55kHz $\pm$ 3kHz
Output Voltage	12V, 24V, 48V or 125Vdc Consult factory for other voltages
Redundancy Diode	Not installed Available as option
Load/Line Regulation	$\pm$ 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	Less than 1% peak-to-peak or 0.2% RMS of the output voltage (20MHz BW)
Efficiency	Output voltage dependent. Typically 80% at full load
Output 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
Standards	Designed to meet EN 60950 and related standards
EMI	EN55022 Class A with margins

Operating Temperature	0°C to 50°C for full specification Wider temperature ranges available
Humidity	5 - 95% non-condensing
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
Dimensions	F1: 114 x 51 x 201mm including terminal block and flanges Mounting holes are clear
Weight	0.8 Kg
Connections	9-pole barrier-type terminal block, 3/8" spacing
MTBF	140,000 hours at 45°C Demonstrated MTBF is significantly higher
Indicators	Green "Power ON" LED, visible through the cooling slots
Control Input	None
Alarm output	None
RoHS Compliance	Fully compliant
Warranty	2 years

