

# DCC65 Series DC/DC Voltage Converter



## Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

## 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

## DC/DC Converters

### DCC65 Single-Output DC Converter

#### Description

The DCC65 Series of DC/DC converters uses a field proven high frequency push-pull topology to generate 300W output power with convection/conduction cooling and 400W if forced air is available.

Any DC input/output configuration is possible.

An optional redundancy diode allows for parallel connection to achieve higher output power or N+1 redundancy.

This feature also makes the unit suitable for battery charging applications.

The chassis-mount design features low component count and high efficiency.

The use of high quality components and rigorous quality control results in a very high demonstrated MTBF confirmed by a track record established in hundreds of applications.

Additional ruggedizing and conformal coating are available for applications requiring higher immunity to shock, vibration, humidity, moisture, dust and insects.

Other options include a Form C output fail alarm and remote shutdown.

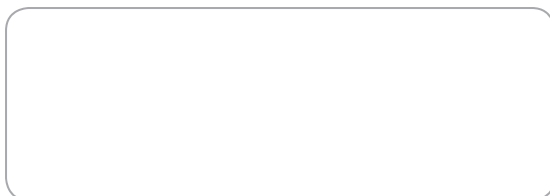
#### Features

- Compact size
- Single regulated and adjustable output
- 300W/400W output power
- Full electronic protection
- Telecom quality
- Field-proven design
- Also available as plugin module
- n+1 redundancy available
- 1 year parts and labour warranty

# Specifications ( Specifications Subject to Change Without Notice)

<b>Input Voltage range</b>	24V or 48VDC or any DC input from 24V to 125VDC At 12VDC input the output power is reduced to 250W
<b>Input Protection</b>	Inrush current limiting Varistor Reverse polarity Internal safety fuse Lower voltage than specified minimum input will not damage the unit
<b>Input Isolation</b>	Appropriate to the input/output configuration to meet safety standards
<b>Output Voltages</b>	24V / 12.5A or 48V / 6.2A standard or any DC output from 12V to 125VDC (Consult factory for other voltages)
<b>Redundancy Diode</b>	Optional
<b>Line / Load Regulation</b>	± 1% combined
<b>Dynamic Response</b>	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
<b>Output Overvoltage Protection</b>	Double regulator loop
<b>Overload Protection</b>	Current limiting with short circuit protection Self-resetting thermostat for thermal protection
<b>Efficiency</b>	Min. 80% at full load
<b>EMI</b>	EN 55022 Class A as a minimum
<b>Switching Frequency</b>	55kHz +/- 3kHz
<b>Output Ripple/Noise</b>	Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20HZ BW)
<b>Operating Temperature</b>	0 to +50°C operating temperature range without derating Extended temperature range available
<b>Temperature Drift</b>	0.03% per °C over operating temperature range
<b>Cooling</b>	Conduction to customer heatsink or chassis and natural convection
<b>Environmental Protection</b>	Basic ruggedizing Optional heavy ruggedizing and conformal coating is available
<b>Humidity</b>	5 – 95% non-condensing
<b>MTBF</b>	160,000 hours @ 45°C (calculated) Demonstrated MTBF is significantly higher
<b>Indicators</b>	Output ON LED visible through the cooling slots
<b>Control Input</b>	Optional
<b>Alarm Outputs</b>	Optional
<b>Connections</b>	12 pole barrier type terminal block with 3/8" spacing
<b>Dimensions</b>	'F3' Package: 29 x 13.2 x 6.4 cm
<b>Weight</b>	1.77 kg
<b>Standards</b>	Designed to meet EN60950 and related UL & CSA standards
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	1 year

Available from:



## RIPEnergy®

The power conversion company

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