

# DCHV2000 Series DC/DC Voltage Converter



## Benefits

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

## Applications

- Trams, light Rail, Metros
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems

## DC/DC Converters

### DCHV2000 Single-Output DC Converter

## Description

This basic rugged, industrial quality power converter system uses field proven modules to generate 2kW output power.

To ensure high reliability and long operating life, all critical components on the primary side are designed and tested for corona inception levels significantly higher than the operating voltages.

Built-in fans provide sufficient airflow for operation at the specified temperature without de-rating.

The fans draw air into the unit and the exhaust exits at the rear of the unit.

It features full electronic protection and low output noise.

Large design headrooms, and the use of components with established reliability result in a high MTBF.

The unit is manufactured at our plant under strict quality control.

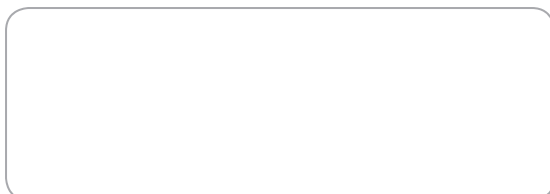
## Features

- Single regulated output
- Rugged construction
- Full electronic protection
- Fan cooling
- Field-proven design
- N+1 redundancy available

# Specifications ( Specifications Subject to Change Without Notice)

<b>Input Voltage</b>	600VDC (450V – 800V range) Input current: 5.5A max.
<b>Input Protection</b>	Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than specified input min. will not damage unit
<b>Isolation</b>	3000VDC input to chassis on each unit 3000VDC input to output on each unit 5600VDC type test 500VDC output to chassis
<b>Output Voltages</b>	12V/130A, 24V/80A or 48V/40A Other outputs on request Output is floating; either terminal can be grounded
<b>Redundancy Diode</b>	Included for the separation of the internal modules
<b>Line / Load Regulation</b>	Better than +/- 1.5% combined from zero load to full load
<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>	Second regulator loop, completely stable and independent of main regulator loop
<b>Output Overload Protection</b>	Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient airflow (self-resetting)
<b>Efficiency</b>	Min 80% at full load depending on input/output configuration
<b>Standards</b>	Designed to meet IEC61010-1 Ed. 2, IEC 62103 Ed. 1, UL 508C and related standards
<b>EMI</b>	EN55022 Class A with margins conducted and radiated
<b>Switching Frequency</b>	55kHz +/- 3kHz
<b>Output Ripple/Noise</b>	Better than 0.2% Vrms and 1% Vpp of the output voltage (@ 20MHz BW)
<b>Operating Temperature</b>	0°C to 55°C for full specification Wider range available as option
<b>Temperature Drift</b>	0.03% per °C over operating temperature range
<b>Cooling</b>	By two built-in fans
<b>Environmental Protection</b>	Basic ruggedizing Full ruggedizing and conformal coating available as an option
<b>Vibration/Shock</b>	IEC 61373 Cat 1 A&B
<b>Humidity</b>	5 – 95% non-condensing
<b>MTBF</b>	85,000 hours @45°C (fans not included) Demonstrated MTBF is significantly higher
<b>Indicators</b>	Optional
<b>Control Input</b>	None
<b>Alarm Output</b>	Optional
<b>Connections</b>	Input: Terminal block Output: Threaded studs
<b>Dimensions</b>	187x132x407 mm including connectors Can be chassis or 19" rack mounted
<b>Weight</b>	7kg
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



## RIPEnergy®

The power conversion company

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