

Product Features

- Compact DC/DC Systems in 24V; 48V; 130V
- Fan Cooling; Variable Speed
- Low Ripple Performance
- Front Panel Digital Meter
- Field Proven; Industrial Grade Switch-Mode Architecture
- Galvanic Isolated Design (In/Out)
- Parallel Operation Diodes
- 2U x 19" Rackmount
- Wide Temperature Range
- Heavy Duty Input/Output Terminals
- IEEE C37.90.1 (SWC)

Alarm & Control Interface

- Front Panel Volt/Amp Selector
- Form-C Alarm Contacts
- Circuit Breaker Protection
- Over-Current Protection
- High MTBF

Majorpower Rackmount DC/DC Converter



Product Overview

The MDC Series rack mounted systems offer DC conversion capabilities for multiple voltage arrangements. The converter utilizes high-frequency, extremely low ripple, galvanic isolation architecture for peak performance.

The simple system combines a compact rack installation with easy to use controls and metering. Combine multiple units together for increased capacity and fault tolerance reliability.

Reliable regulated power with integrated filtering, stability and output protection that is suitable for many critical applications throughout telecom, cable, IT and utilities.

System Selection Guide

Order Number	INPUT	OUTPUT	Output Capacity
MDC130-48/20-2U	130 VDC	48 VDC	20 A
MDC130-24/40-2U	130 VDC	24 VDC	40 A
MDC48-24/35-2U	48 VDC	24 VDC	35 A
MDC24-48/18-2U	24 VDC	48 VDC	18 A

Standard Equipment – Each system includes:

- | | |
|--|---|
| ➤ Integrated Voltage and Current Digital Meter | ➤ Temperature Controlled Fan Cooling |
| ➤ Control & Protection via Circuit Breaker | ➤ Peak Efficiency with Galvanic Isolation |
| ➤ Form-C Alarm Contacts | ➤ Heavy Duty Input & Output Terminals |

DC Conversion Solutions

Electrical Characteristics

Voltage Conversion	Input Range (VDC)	Output Range (VDC) *	Default (V)	Rated Current (A)	Watts (W)
130 → 48	100 - 160	46 - 54	48.2	20	980
130 → 24	100 - 160	23 - 26	24.5	40	980
48 → 24	40 - 60	23 - 26	24.5	35	840
24 → 48	22 - 34	46 - 54	48.2	18	860
output voltage regulation				+/- 1 %	
output ripple (rms)				< 10 mV	
line regulation				0.1 %	
efficiency				90%	
idle current (no load)				45 mA	
output voltage adjustment				front panel	
parallel operation			integrated diodes for isolation		
protection			reverse polarity; overload; non-destructive short circuit		
input DC protection			circuit breaker; serves as ON/OFF Switch		

Mechanical Specifications

width x depth x height	16.5 x 14.75 x 3.5 in (420 x 375 x 88mm)
weight	10 pounds (4.5 kg)
chassis	19 inch rackmount; 2U
handles	lifting grips; front panel left & right
operation environment	-30 to +50°C
forced air cooling	variable speed thermostatically controlled after 60 sec self-test.
BTU (full load)	≈ 281 per hour
alarm	form-C dry contacts rated at 125Vac @ 1A. / 20-24 AWG input fail; output fail; overload
digital meter	accuracy +/- 1% / switch controlled display for volt or amp

* Optional Higher Voltage Available (factory procedure)

Specifications subject to change without notice