CM Series Converter

High Voltage DC-DC

2.0kW MAX | **48V** OUT | **GREEN** ENERGY

A DC-DC converter that employs an advanced topology to optimize the operational benefits. The ideal converter where energy conversion is required.

Applications include industrial sites, microgrids and those data centres migrating to 380V DC designs where 48V DC loads are installed.

With a peak efficiency >97%, the CM2048HE high-efficiency HV converter provides significant energy savings. It converts 320-380V DC input to 48V DC output with minimal loss. It's compatible with lithium-based battery technologies and can be used in combination with renewable inputs.

Modules intended operation is with a 48V DC battery connected to the output.

New Zealand-made to guarantee design, manufacture and process integrity, the CM Series represents unrivalled reliability with a robust proven conversion topology that includes only highest specification components. Modules can be integrated within COMPACT solutions.

KEY FEATURES

- Robust design and a proven topology for optimum reliability

- High-efficiency conversion

- Wide range DC input for maximum flexibility

- Scalable, modular architecture for quick and easy system integration/expansion

- Forced-air cooled by a temperature controlled, high-reliability, monitored fan

CM2048HE
HV CONVERTER

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Specifications

DC INPUT	CM2048HE	CM1848HE
Nominal Input Voltage:	350V DC	100V DC
Input Voltage Range:	100–400V (200–360V DC non-derating output power)	60–140V (limited to 17A input)
Peak Efficiency:	>97% @ 20–85% load with 200-250V DC input	>96% @ 25–70% load with 85-100V DC input

DC OUTPUT		
Nominal Output Voltage:	48V DC	
Output Voltage Range:	43-60V DC	
Maximum Output Current:	41.7A	37.5A
Maximum Output Power:	2.0kW	1.8kW

ENVIRONMENTAL REQUIREMENTS		
Ambient Temperature:	-20ºC to +70ºC (maximum output power is derated above 55ºC)	
Storage Temperature:	-30ºC to +85ºC	

MECHANICAL		
Dimensions (W, H, D):	111.5mm, 44.0mm (1U), 282.0mm overall (rack depth 260.0mm)	
Weight:	1.50kg	
Cooling:	Forced-air cooled (front to back airflow)	

COMPLIANCES		
Safety:	EN60950, IEC62109	
Immunity:	CISPR24	
Emissions:	CISPR22 Class B	
Other:	CE & RoHS compliant	

CE RoHS Contact Enatel for datasheets and characterization details. Due to product development, specifications are subject to change without prior notice. Pictures may be representative: actual products may differ.