### **CM Series** Converter HV

High Voltage DC-DC



## CM1848HE / CM2048HE

DC CONVERTER

DC OUT

MAX OUTPUT **2.0kW** 

#### **Key Features**

- Robust design and a proven topology for optimum reliability
- Highest efficiency conversion
- · Wide range DC for maximum flexibilty
- Scalable, modular architecture for quick and easy system intergration/expansion
- Modular architecture for quick and easy system integration/expansion
- Forced-air cooled by a temperature controlled, high-reliability, monitored fan



#### Advanced Topology

A DC-DC converter that employs an advanced topology to optimise 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.

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# **CM Series** Converter HV Specifications



ELECTRICAL	CM1848HE	CM2048HE
DC INPUT RATINGS		
NOMINAL VOLTAGE:	100V	350V
INPUT VOLTAGE RANGE:	60–140V (limited to 17A input)	85–400V (200–360V non-derating output power)
PEAK EFFICIENCY:	>96% @ 25–70% load with 85-100V DC input	97.44% @ 20–85% load with 200–250V DC input
DC OUTPUT RATINGS		
NOMINAL VOLTAGE:	48V	
VOLTAGE RANGE:	43-60V	
MAXIMUM OUTPUT CURRENT:	37.5A	41.7A
POWER RATING:	1.8kW	2.0kW
ENVIRONMENTAL REQUIREMENT	s	
AMBIENT TEMPERATURE:	-20°C to 70°C [-4°F to 158°F] maximum output power is derated above 50°C [122°F]	
STORAGE TEMPERATURE: -30°C to 85°C [-22°F to 185°F]		
COMPLIANCES		
SAFETY:	EN 60950-1, IEC 62109-1	
IMMUNITY:	CISPR24	
EMISSIONS:	CISPR22 Class B	
OTHER:	CE & RoHS Compliant	
MECHANICAL		
WIDTH:	111.5 mm [4.39 in]	
DIMENSIONS: HEIGHT:	44.0 mm [1.73 in] (1U)	
DEEP:	282.0 mm [11.1 in] overall (rack depth 260.0 mm [10.24 in])	
WEIGHT:	1.50kg [3.31 lb]	
COOLING:	Forced-air cooled (front to back airflow)	