

CM Series Converter - HV

HIGH VOLTAGE DC-DC

PRODUCT SHEET

POWER
OUTPUTS

MAX
OUTPUT
2.0kW

DC OUT
48V

KEY FEATURES

- Robust design and a proven topology for optimum reliability
- Highest efficiency conversion
- Wide range DC for maximum flexibility
- 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



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.

CM Series Converter - HV

HIGH VOLTAGE DC-DC

PRODUCT SHEET

POWER
OUTPUTS

MAX
OUTPUT
2.0kW

DC OUT
48V



Specifications

DC INPUT RATINGS

MODEL:	CM2048HE	CM1848HE
NOMINAL VOLTAGE:	350V	100V
INPUT VOLTAGE RANGE:	85–400V (200–360V non-derating output power)	60–140V (limited to 17A input)
PEAK EFFICIENCY:	97.44% @ 20–85% load with 200-250V DC input	>96% @ 25–70% load with 85-100V DC input

DC OUTPUT RATINGS

NOMINAL VOLTAGE:	48V	
VOLTAGE RANGE:	43-60V	
MAXIMUM OUTPUT CURRENT:	41.7A	37.5A
POWER RATING:	2.0kW	1.8kW

ENVIRONMENTAL REQUIREMENTS

AMBIENT TEMPERATURE:	-20°C to 70°C [-4°F to 158°F] (maximum output power is derated above 55°C [131°F])
STORAGE TEMPERATURE:	-30°C to 85°C [-22°F to 185°F]

MECHANICAL

DIMENSIONS:	W: 111.5 mm [4.39 in]
	H: 44.0 mm [1.73 in] (1U)
	D: 282.0 mm [11.1 in] overall (rack depth 260.0 mm [10.24 in])
WEIGHT:	1.50 kg [3.31 lb]
COOLING:	Forced-air cooled (front to back airflow)

COMPLIANCES

SAFETY:	EN 60950-1, IEC 62109-1
IMMUNITY:	CISPR24
EMISSIONS:	CISPR22 Class B
OTHER:	CE & RoHS Compliant

Due to product development, specifications are subject to change without prior notice. Pictures may be representative: actual products may differ.