

# 2kW Wind Charger WM2048HE

EXTREME COMPATIBILITY

PRODUCT SHEET

POWER  
OUTPUTS

MAX  
OUTPUT  
2.0kW

DC OUT  
48V

## KEY FEATURES

- Highest efficiency conversion, more than 97%
- Widest range of DC input for greater flexibility
- Lowers OPEX by up to 80%
- Modular architecture for quick and easy system integration/expansion
- Increases your return on investment
- Configurable power curve



With peak efficiency near 98%, Enatel's WM2048HE high-efficiency Wind Charger provides significant energy savings.

Each charging module is designed for operation with a high-voltage wind turbine and with a wide input operating voltage window, offers maximum flexibility for the greatest optimization. High voltage turbines offer superior performance with fewer losses than low voltage alternatives.

The WM2048HE allows rapid wind harvesting against varying wind speeds by using an embedded look-up table to intelligently determine the optimal power levels and avoid overload. This combined with the highest conversion efficiency maximizes wind power generation, delivering the greatest ROI.

Enatel's wind chargers are New Zealand-made to guarantee design, manufacture and process integrity. The WM2048HE represents unrivalled reliability with a robust proven conversion topology.

Modules can be integrated into COMPACT solutions or operate as standalone units.

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## Specifications

### DC INPUT RATINGS

NOMINAL VOLTAGE:	220V DC
INPUT VOLTAGE RANGE:	85–400V (200–360V DC non-derating output power)
MAXIMUM OPEN CIRCUIT VOLTAGE:	450V DC
PEAK EFFICIENCY:	97.35% @ 20–85% load with 200-250V DC input

### DC OUTPUT RATINGS

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

### 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.