

enATEL

# 2kW Wind Charger Converter



## WM2048HE

DC CONVERTER  


DC OUT  
**48V**

MAX OUTPUT  
**2.0kW**

### 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

### Extreme Compatibility

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 optimisation. 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 maximises 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.



# 2kW Wind Charger Converter Specifications



ELECTRICAL		WM2048HE
<b>DC INPUT RATINGS</b>		
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	
<b>DC OUTPUT RATINGS</b>		
NOMINAL VOLTAGE:	48V DC	
VOLTAGE RANGE:	43–60V DC	
MAXIMUM OUTPUT CURRENT:	41.7A	
POWER RATING:	2.0kW	
<b>ENVIRONMENTAL REQUIREMENTS</b>		
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]	
<b>COMPLIANCES</b>		
SAFETY:	IEC 62109-1, AS 62040.1	
IMMUNITY:	CISPR24	
EMISSIONS:	CISPR32	
OTHER:	CE & RoHS Compliant	
<b>MECHANICAL</b>		
DIMENSIONS:	WIDTH:	111.5 mm [4.39 in]
	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)	

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