



Telecommunications



Data centers



Industries



Renewable

SOLAR SERIES CONVERTER

CNVENASM SERIES

enATEL
energy



DESCRIPTION

With peak efficiency near 98%, the Solar Series high-efficiency Solar Charger provides significant energy savings. Each charging module is designed for operation with solar panel configurations of one or two strings and, with a wide input operating voltage window, offers maximum flexibility for the greatest optimization.

Module design is based on a high-frequency transformer guaranteeing galvanic isolation between that of solar panels and loads and batteries. Various additional protection elements ensure safety and investment preservation.

The Solar Series chargers include market leading MPPT algorithms, allowing commencement of solar harvesting far sooner and for much longer than other comparative devices. This combined with the highest conversion efficiency maximizes PV generation delivering the greatest ROI.

Enatel's solar chargers are New Zealand-made to guarantee design, manufacture and process integrity. The Solar Series represents unrivalled reliability with a robust proven conversion topology. Modules can be integrated into COMPACT solutions or operate as standalone units.

KEY FEATURES

- Industry-leading MPPT for the greatest solar harvesting.
- Highest efficiency conversion.
- Widest range of DC input for maximum PV flexibility.
- Lowers OPEX by up to 80%.
- Increases return on investment.
- Modular architecture for quick and easy system integration/expansion.
- Forced-air cooled by a temperature controlled, high-reliability, monitored fan.

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SPECIFICATIONS

	CNVENASM2048HE	CNVENASM1848HE
DC INPUT RATINGS		
Nominal Voltage	220V	100V
Input Voltage Range	85-400V (200-360V non-derating output power)	60-140V (limited to 17A input)
Start-up Voltage	120V	60V
Maximum Open Circuit Voltage	450V	160V
Maximum Input Current	10.5A	18A
Mppt Efficiency	98.5%	98.5%
Peak Efficiency	>97% @ 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 [13°F])	
Storage Temperature	-30°C to 85°C [-22°F to 185°F]	
MECHANICAL		
Dimensions (W, H, D)	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, IEC 62109-2	
Immunity	CISPR24	
Emissions	CISPR22 Class B	
Other	CE & RoHS Compliant	