

EN-WALL MODULE

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TECHNICAL DATA SHEET 10KWH - 48V

VERSION 1.0, Revision 0 ENW-10k-48-1C-X-5K-X-X_1V0_GEN1 RELEASE DATE: 02 June 2023



EN-WALL MODULE

This is multi-functional module, combining functions of inverter, battery and battery charger to offer interruptible power support. Its comprehensive LCD display offers user configurable and easy accessible button operation.

BATTERY PERFORMANCE SPECIFICATIONS

DC Energy	10kWh
Voltage Range	43.2Vdc to 60.8Vdc
DC Voltage (Nominal)	48Vdc
Internal Resistance	<4 mΩ

CELL SPECIFICATIONS / CHARGE CHARACTERISTICS

Technology	Encapsulated Cell
Nominal Cell Voltage	6.4~6.6Vdc / Cell (Encapsulated) 1/2 + 0.12V Envelope
Maximum Charge Current	135A
Maximum Discharge Current	135A
Charging Curve	3 Stages / Equalization (CC / CP / VP)
Charging Strategy for Battery	Self-adaption to BMS

PV STRING INPUT DATA

Max. DC Input Power (W)	7800W
PV Input Voltage (V)	370V (125V ~ 500V)
MPPT Range (V)	150 ~ 425V
Full Load DC Voltage Range	300 ~ 425V
Start-up Voltage (V)	125V
PV Input Current (A)	13A + 13A
Max. PV Isc (A)	17A + 17A
No. of MPPT Trackers	2
No. of Strings Per MPPT Tracker	1+1



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AC OUTPUT DATA

Rated AC Output and UPS Power (W)	6600W
Max. AC Output Power (W)	6600W
Peak Power (off grid)	2 times of rated power, 10S
Max.AC Current (A)	30/28.7A
Max. Continuous AC Pass through (A)	27.3/26.1A
AC Output Rated Current (A)	40A
Output Frequency and Voltage	50/60Hz; 220/230Vac (Single Phase)
Grid Type	Single Phase

Power Factor	0.8 leading to 0.8 lagging
Total Harmonic Distortion (THD)	<3% (of nominal power)
DC Current Injection	<3% (of nominal power)

EFFICIENCY

Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	<99%

PROTECTION

Battery Short Circuit Protection	Electronic Switching, Terminal Cut-off
Battery Over/Under Voltage	Electronic Switching, Terminal Cut-off
Battery Over Current	Electronic Switching, Terminal Cut-off
Battery Over Temperature	Electronic Switching, Terminal Cut-off
PV Arc Fault Detection	Integrated
PV Input Lightning Protection	Integrated
Anti-islanding Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated



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PROTECTION

Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output Shorted Protection	Integrated
Surge Protection	Integrated



SMART FEATURES

OLED Display	Monitor & Configure Module
Communication	WiFi / CANBUS / Bluetooth
Alarm	Buzzer Alarm in the event of Over/Under Voltage, Over Current, Over Temperature

EN-CONNECT SOFTWARE

Γ	Module Monitoring	Total Voltage, Individual Cell Voltages, Current, Temperatures, Instantaneous Power, SOC and
Iviodule	Module Monitoring	Energy Consumed

ENVIRONMENTAL SPECIFICATIONS

Cell Operating Temperature	Charging: 0 ~ 50°C / Discharging -20 ~ +55°C
Operating Humidity	Non-Condensing
Warehousing	Can be stored at any SOC without affecting cycle life

MECHANICAL SPECIFICATIONS

Dimension (W x H x D) mm	659 x 1267 x 250
Installation Style	Wall Mounted
Module Casing Material	GI Powdered