

C & I Energy Storage Integrated System

125kW/261kWh



Active Safety

- Module-level and system-level fire detection and suppression system to enhance product safety
- Pack IP67 protection, system IP54 protection



Streamlined & Flexible

- PCS+BMS+EMS integrated design
- Optional MPPT and STS modules to accommodate various applications
- Modular DC cabinet design supports flexible configuration for 2-hour, 4-hour, and 8-hour charge/discharge solutions



Smart & Efficient

- Adopts active balancing BMS to improve battery consistency and extend cycle life
- Liquid cooling thermal management to maintain the optimal operating temperature of battery
- Local EMS for real-time system monitoring and control



Billion Electric Co., Ltd.

8F, No.192, Sec. 2, Zhongxing Rd., Xindian Dist., New Taipei City 23146, Taiwan

+886-2-2914-5665  power@billion.com



Website



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System Specification Fusio Nex 125kW/261kWh

Grid AC	
Rated Voltage	400Vac
Voltage Range	340Vac ~ 460Vac
Wiring Method	3W+N+PE
Frequency Range	50Hz/60Hz $\pm$ 2.5Hz
Rated Current	180A
Power Factor	0.99/-1 ~ 1

Load AC	
Rated Output Power	125kW (On-grid)/ 100kW (Off-grid)
Grid Voltage Range	340Vac ~ 460Vac
Grid Frequency Range	50Hz/60Hz $\pm$ 2.5Hz
Rated Current	180A
Wiring Method	3W+N+PE
Power Factor	0.99/-1 ~ 1
Overload Capacity	110% @ambient temperature $\leq$ 40°C

MPPT (DC/DC)	
Rated Power	62.5kW * 2 sets
MPPT	4 * 2 sets
PV Max. Current	45A * 8
PV Input Voltage Range	350Vdc ~ 1,000Vdc
MPPT Voltage Range	150Vdc ~ 1,000Vdc
DC/DC Voltage Range	600V ~ 1,000V
Max. DC Current	198A

STS	
Rated Voltage	400Vac
Operating Voltage Range	340Vac ~ 460Vac
Rated Power	300kVA
Rated Current	433A
On/Off-grid Transfer Time	$\leq$ 20mS

Battery	
Rated Power	261kW
Nominal Voltage	832Vdc
Voltage Range	728Vdc ~ 936Vdc
Battery Configuration	1P260S
Max. Charging/Discharging Current	180A
Self-Discharge Rate	$\leq$ 3% per month
Round-Trip Efficiency	Energy Efficiency $\geq$ 94%
Charging Temperature	0°C ~ +55 °C
Discharging Temperature	-20 °C ~ +55 °C
Cooling Method	Liquid Cooling
SOC Accuracy	$\leq$ 5%

General Specifications	
Max. Efficiency	$\geq$ 87%
Communication Interface	RJ45
Communication Protocol	Modbus TCP, CAN bus
Operating Temperature	-30°C ~ 60°C
Operating Humidity	0% ~ 95% (non-condensing)
Storage Temperature	-20°C ~ 35°C
Degree of Protection	IP54
Operating Altitude	3,000m
Fire Protection System	Temperature, smoke, and flammable gas detection and Aerosol fire suppression
Electrical Cabinet Dimension	700 x 1,310 x 2,200 mm (W*D*H)
Battery Cabinet Dimension	998 x 1,310 x 2,200 mm (W*D*H)
System Dimension	1,700 x 1,310 x 2,200 mm (W*D*H)
Electrical Cabinet Weight	710 Kg
Battery Cabinet Weight	2,500 Kg
System Weight	3,210 Kg

Compliance Standards

PCS: IEC 61000、IEC 62477 / BAT: IEC 62619、IEC 60730、UN38.3

C & I Energy Storage System Solutions

Configuration Diagram				
PCS	BNP-125K-400-E			
Battery	314Ah 0.5C			
System Power-Capacity	125kW	125kW	125kW	125kW
Beginning of Life (BOL)	261kWh	522kWh	783kWh	1044kWh
Full Charge/Discharge Time	2hours	4hours	6hours	8hours
Units of DC/Electrical Cabinet	1/1	2/1	3/1	4/1