

Fusio Nex

C & I Energy Storage Integrated System

125kW/261kWh



Active Safety

- Module-level & System-level fire detection and suppression system to enhance product safety.
- Battery pack IP67 protection, system IP54 protection.



Compact & Flexible

- Integrated Design with PCS, BMS, and EMS.
- Optional MPPT and STS modules to accommodate various applications.
- Modular battery enclosure design, scalable for 2-, 4-, 6-, or 8-hour charge/discharge configurations.



Smart & Efficient

- Equipped with an Active-Balancing BMS to improve cell consistency and extend battery cycle life.
- Liquid-cooling thermal management to maintain optimal battery temperature and extend cycle life.
- Integrated on-site EMS for real-time operational monitoring.



Fusio Nex Series

Model	BESS	Bat	PCS	STS	MPPT	UPS	Application
T	Grid-Tied ESS	v	v			▲	Time-of-Use Arbitrage, Demand Response, Fast Frequency Response
B	Backup ESS	v	v	v		v	Backup Power, Critical Facility Backup
S	Off-Grid Solar+ESS	v	v		v	v	PV Self-consumption, Off-grid Operation, Islanded Operation
H	Hybrid ESS	v	v	v	v	v	Peak Shaving & Valley Filling, Smart Grid Integration, Resilient ESS

▲ Optional

Fusio Nex-H Specification

Grid AC		Battery	
Rated Voltage	400Vac	Rated Energy	261kWh
Voltage Range	340Vac~460Vac	Nominal Voltage	832Vdc
Voltage Configuration	3-phase 4-wire + PE (3W+N+PE)	Voltage Range	728Vdc~936Vdc
Grid Frequency Range	50Hz/60Hz±2.5Hz	Battery Configuration	1P260S
Rated Current	180A	Max Charge/Discharge Current	180A
Power Factor	0.99/-1~1	Self-discharge Rate	≤ 3% per month
		Battery Energy Efficiency	Energy Efficiency ≥ 94%
Load AC		Charging Temperature Range	0°C~+55 °C
Rated Output Power	125kW(Grid-tied)/100kW(Off-grid)	Discharging Temperature Range	-20 °C~+55 °C
Voltage Range	340Vac~460Vac	Cooling Method	Liquid Cooling
Frequency Range	50Hz/60Hz±2.5Hz	SOC Estimation Accuracy	≤5%
Rated AC Current	180A		
Voltage Configuration	3-phase 4-wire + PE (3W+N+PE)	General Specifications	
Power Factor	0.99/-1~1	Max Conversion Efficiency	≥ 87%
Overload Capability	110% @ Ambient Temp ≤ 40°C	Communication Interface	RJ45
		Communication Protocol	Modbus TCP 、 CAN bus
MPPT (DC/DC)		Operating Temperature	-30°C~60°C
Rated Power	62.5 kW × 2 sets	Operating Humidity	0% ~95% (non-condensing)
MPPT Inputs	4 strings × 2 sets	Storage Temperature	-20~35°C
Max PV Current	45 A × 8 strings	Protection	IP54
PV Input Voltage Range	350Vdc~1,000Vdc	Corrosion Category	C5
MPPT Voltage Range	150Vdc~1,000Vdc	Altitude	3,000m
DC/DC Voltage Range	600V~1,000V	Fire Protection System	Temperature, Smoke, and Combustible Gas Detection; Aerosol Fire Suppression
Max DC Current	198A	Electrical Cabinet Dimension	706x1,310x 2,200mm (W*D*H)
		Battery Cabinet Dimensions	998x1,310x2,200mm (W*D*H)
STS		Overall Dimensions	1,704x1,310 x 2,200mm (W*D*H)
Rated Voltage	400Vac	Electrical Cabinet Weight	598Kg(T) 、 625Kg(B) 、 695Kg (S) 、 710Kg (H)
Operating Voltage Range	340Vac~460Vac	Battery Cabinet Weight	2,500Kg
Rated Power	300kVA	Total System Weight	3,210Kg
Rated Current	433A	Compliance Standards	
Grid-to-Off-grid Transfer Time	≤ 20mS	PCS: IEC 61000 、 IEC 62477 / BAT: IEC 62619 、 IEC 60730 、 UN38.3	

C & I Energy Storage System Solutions

System Configuration				
PCS	BNP-125K-400-E			
Battery	314Ah 0.5P			
System Power-Capacity	125kW	125kW	125kW	125kW
Beginning of Life(BOL)	261kWh	522kWh	783kWh	1,044kWh
Full Charge/Discharge Time	2hours	4hours	6hours	8hours
Units of DC/Electrical Cabinet	1/1	2/1	3/1	4/1