

YOUR SAFE ENERGY



NX241A125-24M
241kWh/125kW

 A+ Grade Lithium Iron Phosphate Cells

 15-year Design Lifespan

Version:V1.0

**Air-Cooled Battery
All-in-One C&I BESS**



● Features and Advantages

Safety Technology

- A+ grade lithium iron phosphate
- The system is configured with a multi-level fuse protection
- Built-in aerosol fire extinguishing systems at the package and rack levels

More Reliable

- The system is rigorously designed and tested to operate stably under various conditions
- Equipped with protections against overcharge over-discharge, and over-temperature to prevent accidents

Easy to Install and Use

- Highly integrated for ease of transportation, installation and deployment
- Modular design with flexible system capacity configuration

Energy Management System

- Emergency power supply
- Peak shaving
- Demand mitigation
- Self-consumption
- Micro-grids
- Price arbitrage

System Technical Parameters

Model	NX241A125-24M
Battery Data	
Nominal energy	241kWh
Nominal voltage	768V
Battery Chemistry	Lithium Iron Phosphate(LiFePO4)
Cycle Life	≥8000 cycles(@25°C, 0.5P/0.5P)
Cell Specification	3.2V 314Ah
Battery Pack Energy	20.096 kWh
String Configuration	1P240S
Number Of Racks	1
Operating Voltage	672V~876V
Rated Charging Power	0.5P
Rated Discharging Power	0.5P
Safety	
Fire Extinguishing System	Aerosol fire extinguishing
Inverter Data	
Rated Power	125kW
Please Refer To The Pcs Section For More Details.	
General	
Dimensions(W x D x H)	1180 x 1360 x 2250mm
Weight	Approximately 2400kg
IP Rating	IP54
Cooling method	Smart air cooling
Operating Temperature	-20°C - +50°C
Storage Temperature	-20°C - +45°C
Relative Humidity	15% - 90%(Non-condensing)
Operating Altitude	≤3000m
Communication Interfaces	LAN/CAN/RS485
Compliance	IEC 62619, IEC/EN 61000, UN 38.3, MSDS

* The actual product may have slight differences from some promotional videos or pictures. Please refer to the actual product. Unless otherwise specified, the data on this page are all from our company's laboratory. The data may have errors due to changes in the objective environment.

* The specifications are subject to change without prior notice.

Power Conversion System



● Features and Advantages

- It supports a wider DC voltage range, from 600 to 1,000V, and may adapt to different battery system configurations;
- Compared with the traditional IGBT system, the SIC power device has higher efficiency and lower loss, and is conducive to improving project profitability for industrial and commercial users;
- Technical features: three-phase four-leg, hardware architecture to maintain IN-POWER's characteristics;
- High efficiency, up to 99%;
- Multi-machine grid-disconnected parallel capability;
- The AC side is provided with dual protection for insulation monitoring and leakage current, while the DC side has double contactors and fuses;
- High power density, small product size, conducive to installation in customer's cabinet;
- Built-in EMI, no external filters required;

Inverter Technical Parameters Part 1

Model	NXPCU-125/0.4-W-14-A2-0S
DC Side Parameters	
DC voltage range	DC600V~1000V(Full - load voltage:DC630V-950V limited load voltage:DC600V-630V,DC950V-1000V)
Full-load voltage range	DC630V~950V
Rated DC current	198A
Rated DC power	125kW

Inverter Technical Parameters Part 1

Model	NXPCU-125/0.4-W-14-A2-OS
AC Grid-connected Parameters	
Rated AC power	125kW
Overload capacity	1.1 times(Ambient temperature $\leq 40^{\circ}\text{C}$)
Rated voltage	AC400V
Rated AC current	180A
AC access method	Three-phase four-wire
Grid voltage range	400V (-15%~+15%)
Grid frequency range	50Hz/60Hz $\pm 2.5\text{Hz}$
Total harmonic distortion rate of current	$\leq 3\%$ (full load)
Power factor	0.99/-1~1
Current DC component	$\leq 0.5\%$
Charge and discharge conversion time	$< 100\text{ms}$
AC Grid-disconnected Parameters	
AC grid-disconnected voltage	AC400V
AC voltage range	AC400V $\pm 3\%$
AC grid-disconnected frequency	50Hz/60Hz
Grid-disconnected output THDU	$\leq 3\%$ (linear load)
Unbalanced load capacity	100%
Other Parameters	
Maximum conversion efficiency	$\geq 99\%$
Allowable ambint temperature	$-30^{\circ}\text{C}\sim 50^{\circ}\text{C}$ (Full - load)
Allowable relative humidity	$\leq 95\%$ (No condensation)
Noise	$\leq 75\text{dB}$
Protection grade	IP20
Altitude	3000 m($\geq 2000\text{m}$ for limited load)
Size	W520mm×H240mm×D680mm
Weight	$\leq 70\text{KG}$
Cooling method	Forced air cooling
Wiring, air-out direction	Primary or secondary at the front air-in from front, air-out from rear(One wiring mode)
BMS communication interface	CAN or 485
EMS communication interface	Network interface or 485

