

YOUR SAFE ENERGY

FIR76A30P-05M
76kWh/30kW



A+ grade sodium-ion cells



15-year Design Lifespan

Version:V1.0

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

BMS Active balancing: 2A
Sodium-ion Battery

Na⁺



● Features and Advantages

Safety Technology

- A+ grade sodium-ion cells
- 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

- Peak shaving
- Demand mitigation
- Self-consumption
- Price arbitrage

System Technical Parameters

Model	FIR76A30P-05M
Battery Data	
Nominal Energy	76.8kWh
Nominal Voltage	480V
Battery Model	LV-IESS-RH9.6Sa-HBox-8
Battery Chemistry	Sodium-Ion Battery
Cycle Life	≥9000 cycles(@25°C, 0.5P/0.5P)
Cell Specification	3.0V 160Ah
Battery Pack Energy	9.6 kWh
Number of Racks	1
String Configuration	1P160S
Operating Voltage	320V - 552V
Rated Charging Power	0.5P
Rated Discharging Power	0.5P
Safety	
Fire Extinguishing System	Aerosol fire extinguishing
PCS Data	
Rated Power	30kW
Please refer to the PCS section for more details.	
General	
Dimension(WxDxH)	1050 x 1360 x 2250mm
Weight	Approximately 1700 Kg
IP Rating	IP55
Cooling Method	Smart air cooling
Operating Temperature	-30°C - +50°C
Storage Temperature	-20°C - +45°C
Relative Humidity	15% - 90%(Non-condensing)
Operating Altitude	≤3000m
Communication Interfaces	LAN/CAN/RS485
Compliance	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.

PWS2-30P-EX Bi-directional Storage Inverter



● Inverter Features

Flexible Configuration

- Wide voltage range of 150~750V
- Parallel in both AC side and DC side for larger power & energy

High Efficiency & Stability

- Compatible with 19-inch rack for easy integration and installation

Extensive Use

- Droop control/communication control
- Optional PV charger for DC-coupled hybrid system
- Optional smart transfer switch for auto-backup

Safety & Compatibility

- Global grid certified & listed
- Support lead-acid batteries, lithium batteries & sodium ion batteries & fly-wheel.

PCS Technical Parameters Part 1

Model	PWS2-30P-EX
Battery Side	
Charging and Discharging voltage range	150V-750V(350V-750V @full load)
Rated Power	30kW
Maximum Power	33kW
Maximum Charging and Discharging Current	90A
Battery Switch-off Mode	Relay
Over Voltage Protection	Software Protection
Over Current Protection	Software Protection & DC Fuse
DC Bus Side	
Rated Power	45kW
Input Voltage Range	700V-830V
Maximum Input Current	32.5A*2
AC Grid-tied Output	
Rated Output Power	30kW
Maximum Apparent Power	33kVA
Maximum Active Power	33kW
Rated Grid Voltage	3P4W+PE, 400 ($\pm 15\%$) Vac
Rated frequency	50 (± 2.5) Hz
Power Factor	Listed: 0.8~1 leading or lagging Actual:0.1~1 leading or lagging
THDi	<3%
AC Off-grid Output	
Rated Output Power	30kW
Maximum Apparent Power	33kVA
Maximum Active Power	33kW
Rated Grid Voltage	3P4W+PE, 400 ($\pm 20\%$ configurable) Vac
Rated frequency	50 (± 5 configurable) Hz
Power Factor	Listed: 0.8~1 leading or lagging Actual:0.1~1 leading or lagging
Overload Capacity	110%~120%, 10 min 120%~130%, 1 min 130%~150%, 200ms >150%, 100ms

PCS Technical Parameters Part 2

Model	PWS2-30P-EX	
Off-grid and parallel mode		
	Droop control parallel	Communication parallel
External transformer	Yes	No
Maximum number of parallel	10	10
Total length of parallel lines	No limit	7m
Efficiency		
Peak Efficiency	97.3%	
CEC Measured Efficiency	96.5%	
Communication		
Communication Port	CAN/RS485/Ethernet/WIFI	
General Specification		
Dimension(W*H*D)	440*173*550mm	440*173*596mm (including handles)
Cooling	Forced Air Cooling	
Weight	33kg	
Topology	Non-isolation	
Operation Altitude	3000m(>3000m derating)	
Operation Environment Contamination Level	≤2	
Temperature & Humidity	-30°C~60°C(>45°C derating) & 0-95%	
Noise	≤75dB	
IP Rating	IP20	
Certification		
Grid-tied Standard	EN50549-1 , G99, VDE4105 , VDE4110 , AS477.2:2020 CEI 0-21, Poland Certification, R25, Synergrid listing	
Safety Certification	IEC62477	
EMC Standard	IEC61009	