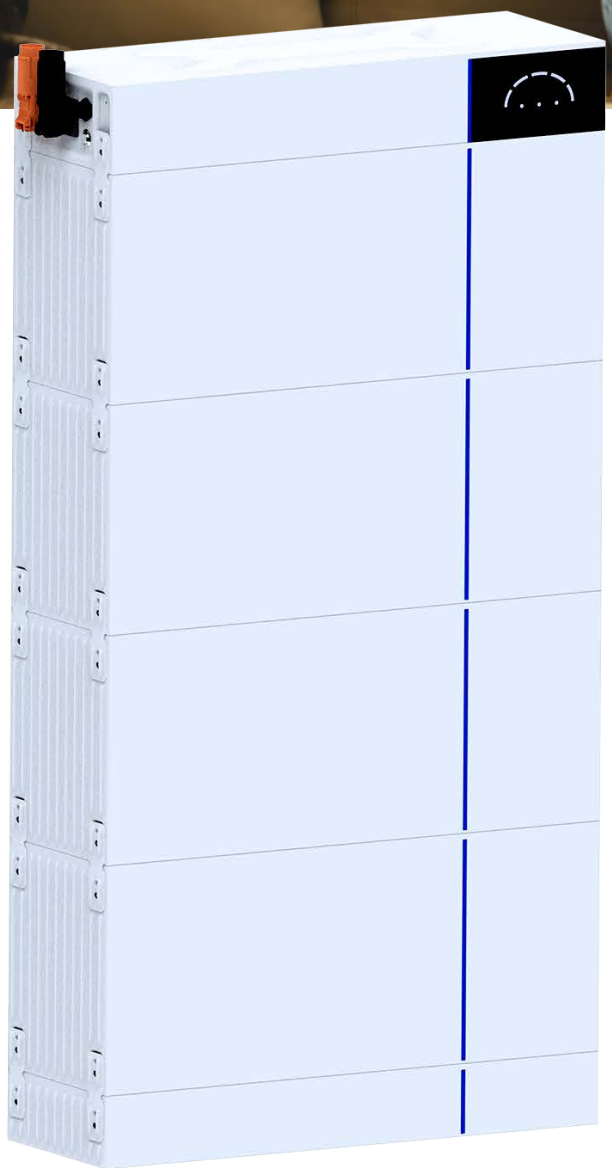
AI-W5.1



- **Safer**
  Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection.

- **Reliable**
  Support high discharge power. IP65, natural cooling, wide temperature range: -20℃ to 55℃.

- **Flexible**
  Modular design, easy to expand, Max. 6 clusters in parallel(36 pcs), Max. capacity of 184kWh.
  Suited to residential and commercial applications for increasing the self-consumption ratio.

- **Convenient**
  Battery module auto networking, automatic IP addressing, easy maintenance, remotely monitoring and upgrade, support USB drive upgrade the firmware.

- **Eco-Friendly**
  Use environmental protection materials, the whole module non-toxic, pollution-free.

- **Quick Installation**
  Flat and stackable design, floor-mounted or wall-mounted, no wiring and extra fixing screws, rapid and easy installation.

Technical Data

Model		AI-W5.1				
Main Parameter						
Battery Chemistry		LiFePO4				
Battery Module Energy (kWh)		5.12				
Battery Module Voltage (V)		51.2				
Battery Module Capacity (Ah)		100				
Scalability		2	3	4	5	6
Nominal Voltage (V)		51.2				
Operating Voltage(V)		43.2~57.6				
Energy (kWh)		10.24	15.36	20.48	25.6	30.72
Usable Energy (kWh) [1]		9.2	13.8	18.4	23.0	27.6
Charge/Discharge Current (A)	Recommend [2]	100	150	200	250	250
	Max. [2]	180	210	240	300	300
	Peak(30s,25℃)	270	315	360	360	360
Other Parameter						
Recommend Depth of Discharge		90%				
Dimension (W/D/H, mm, ref)		720*255*770	720*255*1055	720*255*1340	720*255*1625	720*255*1910
Weight Approximate (kg)		117	163	209	255	301
Master LED Indicator		5LED(SOC:20%~100%), 3LED (working, alarming, protecting)				
IP Rating of Enclosure		IP65				
Operating Temperature		Charge: 0～55℃/ Discharge: -20℃～55℃				
Storage Temperature		0～35℃				
Humidity		5%~95%				
Altitude		≤2000m				
Cycle Life [3]		≥6000(25℃±2℃,0.5C/0.5C,70%EOL)				
Installation		Floor-Mounted, Wall-Mounted				
Communication Port		CAN2.0, RS485				
Warranty Period [3]		10 years				
Energy Throughput [3]		16MWh(Battery Module @70%EOL)				
Certification		IEC62619, CE,VDE2510-10, CEI 0-21, UL1973, UL9540A, FCC, UN38.3				

[1] DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

[2] The current is affected by temperature and SOC.

[3] The warranty is due whichever reached first of warranty period or energy throughput.

Introduction

This series lithium iron phosphate battery is one of new energy storage products developed and produced by Solarker , it can be used to support reliable power forvarious types of equipment and systems.

This series is especially suitable for application scene of high power,limited installation space, restricted load-bearing and long cycle life.

This series has built-in BMS battery management system, which can manage and monitor cells information including voltage, current and temperature. What's more, BMS can balance cells charging and discharging to extend cycle life.

Multiple batteries can connect in parallel to expand capacity and power in parallel for larger capacity and longer power supporting duration requirements.

Battery Pack Accessories

Model	Accessories Parts Description	Remark
AI-W5.1-PDU1	Power Distribute Unit (Standard Configuration)	Battery power and communication interface connect with Inverter and LED display system status
AI-W5.1-Base	Battery Base (Standard Configuration)	The bottom support seat
WT-CCable	Communication Cable (Config Free)	Battery communication cable connect with hybrid inverter
AI-W5.1-PCable	DC Power Cable (Optional)	Battery power cable connect with hybrid inverter

Model: AI-W5.1-PDU1

Details: 720*255*110(W x D x H,mm), 13kg

Model: AI-W5.1-Base

Details: 720*255*90(W x D x H,mm), 10kg

Model: WT-CCable

Details: 3m RJ45 communication cable, One end has a waterproof terminal.

Model: AI-W5.1-PCable

Details: Pair of 2/0 AWG DC power cable connect with hybrid inverter, one end has a waterproof terminal. The cable length can be customized based on customer requirements , default length is 2000mm.