AI-W5.1-10kWh





• 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°C to 55° C.

Flexible

Modular design,5.12kWh moudule, stacked mounting. 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 the firmware.

• Eco-Friendly

Use environmental protection materials, the whole module nontoxic, pollution-free.

Quick Installation

Flat and stackable design, floor-mounted, no wiring and extra fixing screws, rapid and easy installation.



Technical Data

Model		Al-W5.1-10kWh	
Main Parameter			
Battery Chemistry		LiFePO4	
Battery Module Energy (kWh)		5.12	
Battery Module Voltage (V)		51.2	
Battery Module Capacity (Ah)		100	
Scalability		2	
Nominal Voltage (V)		51.2	
Operating Voltage(V)		43.2~57.6	
Energy (kWh)		10.24	
Usable Energy (kWh) ^[1]		9.2	
Charge/Discharge Current (A)	Recommend ^[2]	100	
	Max. [2]	180	
	Peak(10s,25°C)	270	
Other Parameter			
Recommend Depth of Discharge		90%	
System Dimension (W/D/H, mm)		720*255*765	
System Weight (kg)		124	
Battery Module Dimer	nsion(W/D/H, mm)	720*255*285	
Battery Module Weigh	nt (kg)	53	
Master LED Indicator		5LED(SOC:20%~100%), 3LED (working, alarming, protecting)	
IP Rating of Enclosure		IP65 (after stacked)	
Operating Temperatu	re	Charge: 0~55°C / Discharge: -20°C~55°C	
Storage Temperature		-20°C ~ 35°C	
Humidity		5%~95%	
Altitude		≤2000m	
Cycle Life ^[3]		≥6000(25°C±2°C,0.5C/0.5C,70%EOL)	
Installation		Floor-Mounted	
Communication Port		CAN2.0, RS485	
Warranty Period [3]		10 years	
Energy Throughput		16MWh(Battery Module @70%EOL)	
Certification		IEC62619, CE, UK, VDE2510-50, CEI 0-21, UN38.3, CE-LVD, CEC	

DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
The current is affected by temperature and SOC.

[3] Conditions apply, refer to Deye Warranty Letter.

Introduction

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

This series is especially suitable for application scene of high power, limited installation space, restricted loadbearing 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 to extend cycle life. Multiple batteries can connect in parallel for larger capacity and longer power supporting.

Battery Pack Accessories

Model	Accessories Parts Description	Remark
AI-W5.1 (individual package)	5.12kWh Battery Module	Stacked battery modules, each 5.12kWh, a single string can be stacked and installed 1~4 (battery capacity 5~20kWh)
	AI-W5.1-PDU1 (Included)	Battery power and communication interface connect with Inverter and LED display system status
AI-W5.1-PDU1+Base (individual package)	AI-W5.1-Base (Included)	The bottom support seat
	AI-W5.1-PCable1500 (Included)	Battery power and communication cable connect with hybrid inverter
- • B		Details: 720*255*110(W x D x H,mm), 10kg
		Details: 720*255*110(W x D x H,mm), 10kg
		Details: 720*255*110(W x D x H,mm), 10kg Model: Al-W5.1-Base Details: 720*255*85(W x D x H,mm), 8kg
	Model: Al-W5.1-PCabl	Model: Al-W5.1-Base Details: 720*255*85(W x D x H,mm), 8kg

other end is M10 copper terminal) and RJ45 communication cable connect with hybrid inverter (one end has a waterproof terminal) .The default length is 1500mm.

