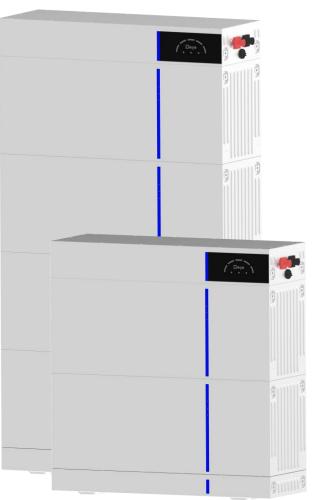
AI-W5.1





Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection. The explosion relief system dredges the gas and the fire protection device cut off fire seat within 3 seconds.

Reliable

Support high discharge power. IP65, natural cooling, wide temperature range: -20°C to 55°C.

• 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 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 www.deyeess.com

Model		Al-W5.1				
Main Parameter Battery Chemistry		LiFePO4				
Battery Module Energy (kWh)		5.12				
Battery Module Voltage (V)		51.2				
Battery Module Capacity (Ah)		100				
System Model		15kWh	20kWh	25kWh	AI-W5.1 30kWh	
Scalability		3	4	5	6	
Nominal Voltage (V)		51.2				
Operating Voltage(V)		43.2~57.6				
Energy (kWh)		15.36	20.48	25.6	30.72	
Usable Energy (kWh) ^[1]		13.8	18.4	23.0	27.6	
Recommend [2]	100	150	200	200	200	
Max. [2]	180	210	240	250	250	
Peak(10s,25°C)	270	315	360	360	360	
Discharge			90%			
System Dimension (W/D/H, mm)		720*255*1055	720*255*1340	720*255*1625	720*255*1910	
System Weight (kg)		163	209	255	301	
Battery Module Dimension(W/D/H, mm)		720*255*285				
Battery Module Weight (kg)		53				
Master LED Indicator		5LED(SOC:20%~100%), 3LED (working, alarming, protecting)				
IP Rating of Enclosure		IP65				
Operating Temperature		Charge: 0∼55°C / Discharge: -20°C∼55°C				
Storage Temperature		0 ~ 35℃				
Humidity		5%~95%				
Altitude		≤2000m				
Cycle Life [3]		≥6000(25°C±2°C,0.5C/0.5C,70%EOL)				
Installation		Floor-Mounted, Wall-Mounted				
Communication Port		CAN2.0, RS485				
			10 years			
Energy Throughput [3]		16MWh(Battery Module @70%EOL)				
Certification		IEC62619, CE,VDE2510-10, CEI 0-21, UN38.3				
	Recommend [2] Max. [2] Peak(10s,25°C) Discharge D/H, mm) ion(W/D/H, mm) (kg)	(V) y (Ah) Al-W5.1 10kWh 2 10.24 9.2 Recommend [2] 100 Max. [2] 180 Peak(10s,25°C) 270 Discharge D/H, mm) 720*255*770 117 ion(W/D/H, mm) (kg) 5LE	(V) y (Ah) Al-W5.1 10kWh 15kWh 2 3 10.24 15.36 9.2 13.8 Recommend [2] 100 150 Max. [2] 180 210 Peak(10s,25°C) 270 315 Discharge D/H, mm) 720*255*770 720*255*1055 117 163 ion(W/D/H, mm) (kg) SLED(SOC:20%~1009) Charge: 0~9 ≥6000(25° Floor-	LiFePO4	LiFePO4	

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

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 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.



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

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

Model	Accessories Parts Description	Remark		
AI-W5.1-PDU1	Power Distribute Unit I (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		
Al-W5.1-PCable	Hybrid inverter Cable (Standard Configuration)	Battery power and communication cable connect with hybrid inverter		
Al-W5.1-BCable	Battery expansion Cable (Optional)	Battery power and communication cable for external battery expansion		



Model: AI-W5.1-PDU1

Details: 720*255*110(W x D x H,mm), 10kg



Model: Al-W5.1-Base

Details: 720*255*90(W x D x H,mm), 8kg



Model: Al-W5.1-PCable

Details: Pair of 2/0AWG DC power cable and RJ45 communication cable connect with hybrid inverter, **one end has a waterproof terminal**. The cable length can be customized based on customer requirements, default length is 1500mm.



Model: AI-W5.1-BCable

Details: Pair of 2/0AWG DC power cable and RJ45 communication cable for external battery expansion, power cable one end has a waterproof terminal, **communication cable both ends have waterproof terminals**. The cable length can be customized based on customer requirements, default length is 1500mm.