

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°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, 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 or wall mount, no wiring and extra fixing screws, quick 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				
Nominal Voltage (V)		51.2				
Operating Voltage (V)		43.2~57.6				
Scalability(Max. in 1 battery group)		2	3	4	5	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/Discharging Current(A)	Recommend ^[2]	100	150	200	250	250
	Max ^[2]	180	210	240	300	300
	Peak (2 mins,25°C)	270	315	360	360	360
Other Parameter						
Depth of Discharge		90%				
Dimension (W/D/H,mm)		697*240*766	697*240*1049	697*240*1332	697*240*1615	697*240*1898
Weight (kg)		117	163	209	255	301
Master LED Indicator		5LED(SOC:20%~100%), 3LED(working, alarming, protecting)				
IP Rating of Enclosure		IP65				
Altitude		≤2000m				
Working Temperature (°C)		Charge: 0~55/Discharge: -20~55				
Storage Temperature (°C)		0 ~ 35				
Humidity		5%~95%				
Cycle Life		@25±2°C,0.5C/0.5C,70%EOL≥6000				
Installation Location		Floor Mounted, Wall Mounted				
Communication Port		CAN2.0, RS485				
Warranty		10 years				
Life Cycle Power During Warranty Period ^[3]		16MWh(Battery Module @70%EOL)				
Certification		UL1973, UL9540A, FCC, IEC62619, CE, VDE2510-10, CE10-21, 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 life cycle power.

Introduction

This series lithium iron phosphate battery is one of new energystorage products developed and produced by Deye , 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.