AI-W5.1-B





• 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, easy maintenance, support remotely monitoring and upgrade the firmware.

• Eco-Friendly

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

Wall-Mounted

Flat and stackable design, support wall-mounted & floor-mounted, no wiring, rapid and easy installation.

Technical Data

Model

Model		Al-W5.1-B					
Main Parameter							
Battery Chemistry		LiFePO4					
Built-in Circuit Breaker		125A 2P, 60Vdc					
Battery Module Energy (kWh)		5.12					
Battery Module Voltage (V)		51.2					
Battery Module Capacity (Ah)		100					
Scalability		1	2	3	4	5	6
Nominal Voltage (V)		51.2					
Operating Voltage(V)		43.2~57.6					
Nominal Energy (kWh)		5.12	10.24	15.36	20.48	25.6	30.72
Usable Energy (kWh) ^[1]		4.6	9.2	13.8	18.4	23	27.6
Charge/Discharge Current (A) ^[2]	Recommend	50	100	150	200	250	250
	Max	180	180	250	250	250	250
	Peak(10s,25°C)	150	270	360	360	360	360
Other Parameter						1	
Recommend Depth of Discharge		90%					
System Dimension (W/D/H, mm)		720*255*569	720*255*850	720*255*1131	720*255*1412	720*255*1693	720*255*1974
System Weight (kg)		74.5	127.5	180.5	233.5	286.5	339.5
Battery Module Dimension (W/D/H, mm)		720*255*300 (without terminal parts)					
Battery Module Weight (kg)		53					
MasterLED Indicator		Battery module: 3LED (working, alarming, protecting), PDU module: 5LED(SOC:20%~100%)&3LED (working, alarming, protecting)					
IP Rating of Enclosure		IP65 (after stacking)					
Operating Temperature		Charge:0~55°C / Discharge: -20°C~55°C					
Storage Temperature		0°C~35°C					
Humidity		5%~95%					
Altitude		≤2000m					
Installation		Wall-Mounted, Floor-Mounted					
Communication Port		CAN2.0, RS485					
Cycle Life		≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)					
Energy Throughput		16MWh(Battery Module @ 70%EOL)					
Warranty Period ^[3]		10 years					
Certification		UN38.3, IEC62619, CE, UK, VDE2510 -50, CEI 0-21,CE-LVD, CEC					

[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] Conditions apply, refer to Deye Warranty Letter.