



RESIDENTIAL ESS SOLUTION

AI-W5.1 Plus

Deye Spring AI Series



Reliable

High discharge power, IP65
Natural cooling, wide temp: -20°C
to 55°C



Safer

Cobalt-free LFP battery
Intelligent BMS, long lifespan, high
efficiency



Eco-Friendly

Non-toxic materials
Pollution-free



Flexible

Modular, Max. 6 clusters in
parallel (36pcs)
Max capacity 184kWh
Residential/commercial use



Quick Installation

Flat, stackable design
Floor-mounted, no wiring



Convenient

Auto networking, easy maintenance
Remote monitoring, firmware
upgrades

Stacked Battery (LV)

Model		AI-W5.1 Plus combinations					
Main Parameter							
Battery Model Number	AI-W5.1 Plus	AI-W10.2 Plus	AI-W15.3 Plus	AI-W20.4 Plus	AI-W25.6 Plus	AI-W30.7 Plus	
Number of battery units in parallel (Optional)	1	2	3	4	5	6	
Battery Chemistry	LiFePO ₄						
Built-in Circuit Breaker	125A 2P, 60Vdc						
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)	44.8 ~ 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	
Rated DC Power (KW)	2.5	5	7.5	10	12	12	
Charge / Discharge Current (A) ^[2]	Recommend	50	100	150	200	250	
	Max.	100	200	250	250	250	
	Peak (10s, 25°C)	150	270	360	360	360	
Other Parameter							
Recommend Depth of Discharge	90%						
System Dimension (W × D × H, mm)	720×254×565	720×254×847	720x254x1129	720x254x1411	720x254x1693	720x254x1975	
System Weight (kg)	74.5	127.5	180.5	233.5	286.5	339.5	
Battery Module Dimension (W × D × H, mm)	720±3x254±1.5x282±1.5						
Battery Module Weight (kg)	53						
MasterLED Indicator	Battery module : 3LED (working, alarming, protecting) PDU module : LCD (SOC,working,alarming)						
IP Rating of Enclosure	IP65 (after stacking)						
Operating Temperature	Charge: 0~50°C (-20~55°C optional heating)/Discharge: -20~55°C						
Standard charging method by manufacturer	Charge at 25±2°C at constant current 50A until the voltage reaches 57.6V						
Standard discharging method by manufacturer	Discharge at 25±2°C at constant current 50A until the voltage reaches 44.8V						
Storage Temperature	0°C ~ 35°C						
Humidity	5% ~ 95%, non-condensing						
Altitude	≤3000m						
Installation	Floor-Mounted						
Communication Port	CAN2.0, RS485						
Cycle Life	≥6000 (25°C±2°C , 0.5C / 0.5C, 70%EOL)						
Energy Throughput	16MWh (Battery Module @70%EOL)						
Warranty Period ^[3]	10 years						
Certification	UN38.3, IEC62619, CE, UK, VDE2510-50, CEI0-21,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.

[4]Made in China.

Deye APP



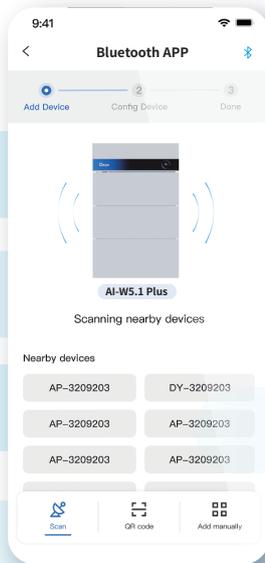
Bluetooth APP Monitoring



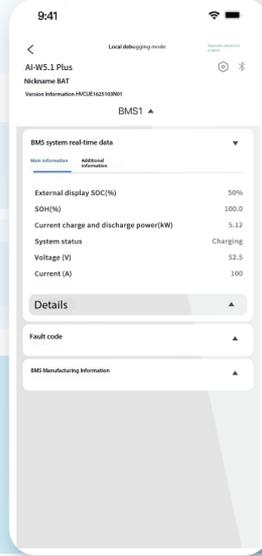
Low Power (Bluetooth LE)



Automated upgrade



Local monitoring mode for battery



Quick Pairing



No Internet Needed



Portable Control



Remote monitoring mode for ESS (Deye Inverter & Battery)



Real-time Equipment Monitoring



Intelligent Charging/Discharging Strategies



AI Data Analytics



Customized Maintenance

Smarten Up Your Home Energy



Download Deye APP to join us!

Embrace a seamless, effortless energy experience that's both ecofriendly and budget-friendly with our intelligent assistant



Deye ESS / Deye New Energy



www.deyeess.com / www.deyeinverter.com