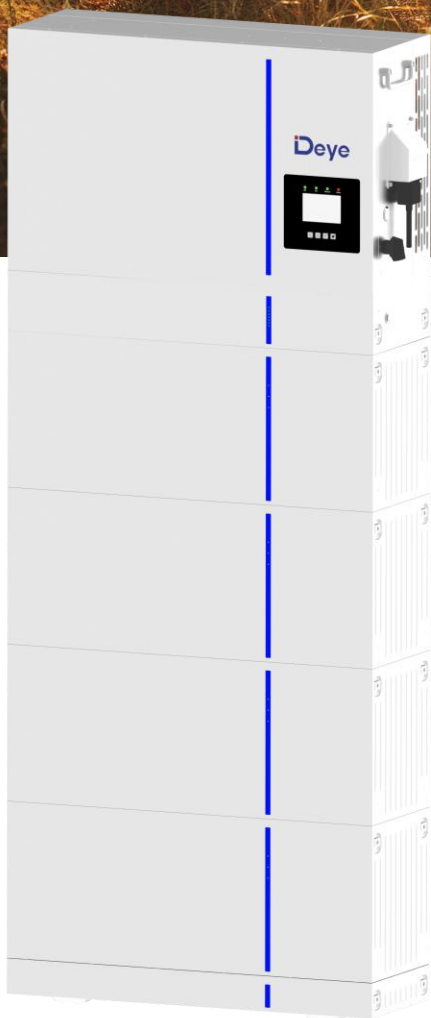


# AI-W5.1-5/6/8/10/12P3-EU-ESS



## All-in-one Energy Storage System

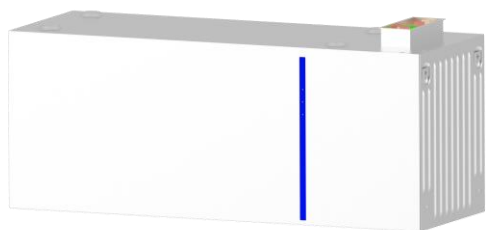
- ◆ All-in-one design, integrated 5kW~12kW hybrid inverter and battery
- ◆ Comfortable and easy control via App, PC or Touch-Display
- ◆ Leading smart application: peak-shaving, smart load, AC couple etc
- ◆ Modular lithium iron phosphate battery, capacity of 5kWh~30kWh, scalable and safety
- ◆ Flat and stackable design, floor mounted, no wiring and extra fixing screws, quick and easy installation.
- ◆ Fast switching time of 4ms, ensuring your energy security

**Deye**

Stock Code: 605117.SH

Model	AI-W5.1-5P3-EU	AI-W5.1-6P3-EU	AI-W5.1-8P3-EU	AI-W5.1-10P3-EU	AI-W5.1-12P3-EU
<b>System Specification</b>					
Nominal Output Power/UPS Power (W)	5000 / 5000	6000 / 6000	8000 / 8000	10000 / 10000	12000 / 12000
AC Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
Recommended Energy Configuration	5kWh(Min.)		10kWh(Min.)		15kWh(Min.)
Max. Charging/Discharging Current (A)	120	150	190	210	240
Battery Operating Voltage (V)	43.2 ~ 57.6				
Battery Chemistry	LiFePO <sub>4</sub>				
IP Rating of Enclosure	IP65				
System Certification	IEC62619, IEC60730, CE, VDE2510-10, CEI 0-21				
Warranty	Battery 10 years (Inverter 5 years)				
<b>Inverter Technical Specification</b>					
Max. PV Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (Vdc)	550V (160V~800V)				
Start Up DC Voltage (Vdc)	160V				
MPPT Voltage Range (Vdc)	200V~650V				
Full Load DC Voltage Range (V)	350~650				
Max. PV Input Current (A)	13+13			26+13	
Max. PV Short-circuit Current (A)	17+17			34+17	
No. of MPP Trackers	2				
Peak Power (off grid)	2 time of rated power, 10s				
Power Factor	0.8 leading to 0.8 lagging				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
Display	LCD				
Relative Humidity	15% ~ 85% (No Condensing)				
Dimension (W x D x H,mm)	720x255x440				
Weight (kg)	38				
Communication with BMS	CAN				
EMC/Safety Regulation	IEC/EN 62109-1,IEC/EN 62109-2,IEC/EN 61000-6-1, IEC/EN 61000-6-2,IEC/EN 61000-6-3,IEC/EN 61000-6-4				
Grid Regulation	VDE4105,IEC61727/62116,VDE0126,AS4777.2,CEI 0-21,EN50549-1, G98,G99,C10-11,UNE217002,NBR16149/NBR16150				
Max. Efficiency	97.60%				
Max. charging/discharging efficiency	95.50%				
<b>Battery Technical Specification</b>					
Nominal Voltage (V)	51.2				
Battery Module Energy (kWh)	5.12				
Module Scalability	Max.36 pcs in parallel(Max. capacity of 184kWh)				
Battery Module Dimension	720*255*285(W x D x H,mm)				
Battery Base Dimension	720*255*90(W x D x H,mm)				
Battery PDU Dimension	720*255*110(W x D x H,mm)				
Battery Module Weight (kg)	50				
Operating Temperature Range	Charge: 0 ~ 55°C / Discharge: -20°C ~ +55°C				
Cycle Life	≥6000(25°C±2°C,0.5C/0.5C,70%EOL)				
Battery Module Certification	IEC62619, CE, VDE2510-10, CEI 0-21, UN38.3				

Model	Accessories Parts Description	Remark
AI-W5.1 Module	5.12kWh Battery Module (Standard Configuration)	Stacked battery modules, each 5.12kWh, a single inverter can be stacked and installed 1~6 (battery capacity 5~30kWh), the maximum expansion of 36 modules to 184kWh.
AI-W5.1-PDU3	Power Distribute Unit III (Recommended Configuration)	Battery power and communication quickly interface connect with Inverter and LED display system status, only support 2~6 modules expansion, capacity 10~30kWh.
AI-W5.1-Base	Battery Base (Standard Configuration)	The bottom support seat
AI-W5.1-PDU2	Power Distribute Unit II (Optional)	Battery power and communication quickly interface connect with Inverter and LED display system status, If the system is configured with more than 6 modules and less than 36 modules, this accessory is required, and PDU3 is not required.
AI-W5.1-BCable	Battery expansion Cable (Optional)	Battery power and communication cable for external battery expansion. This line is not needed for 2~6 modules, and this line is required for parallel connection when there are more than 6 modules.



**Model: AI-W5.1 (Battery Module)**

**Details:** 5.12kWh, 720\*255\*285(W x D x H,mm), 53kg



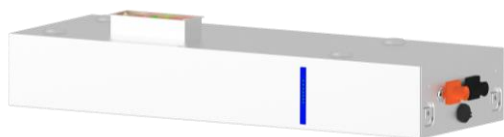
**Model: AI-W5.1-PDU3**

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



**Model: AI-W5.1-Base**

**Details:** 720\*255\*85(W x D x H,mm), 8kg



**Model: AI-W5.1-PDU2**

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



**Model: AI-W5.1-BCable**

**Details:** Pair of 2/0AWG DC power cable and RJ45 communication cable for external battery expansion of **AI-W5.1-PDU2**, 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.



**Model: Wi-Fi module(Optional)**

**Details:** After connecting the device, check the status of NET lights, COM lights, and READY lights, and see if there is data on the platform.

**When the router is connected to the network normally:**

- 1.NET light is always bright (server connection is successful),
- 2.READY light is flashing (collection rod is working normally),
- 3.COM light is always bright (collection rod is connected to inverter successfully).