

RESIDENTIAL ESS SOLUTION

DEYE SPRING AI SERIES



All-in-One

- ⊗ Integrated hybrid inverter
- ⊗ And LFP battery



Smarter

- ⊗ Peak-shaving, smart load
- ⊗ AC coupling, etc.



Scalable

- ⊗ Flat and stackable design
- ⊗ Capacity of 5kWh~30kWh



Swift Security

- ⊗ Fast switching time of 4ms
- ⊗ Ensuring energy security



Flexible

- ⊗ No wiring and extra fixing screws
- ⊗ Quick and easy installation



Convenient

- ⊗ Comfortable and easy control
- ⊗ Via App, PC or Touch-Display

≥6000

Cycles

IP65

Rated for indoor and outdoor use

70%

EOL

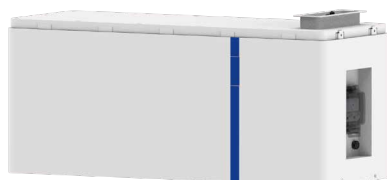
10 years

Warranty for long-term peace of mind

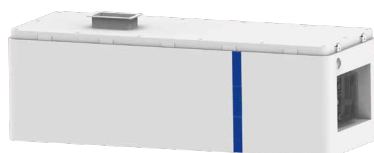
Model (Single-phase)	AI-W5.1-3.6P1-AU-B	AI-W5.1-5P1-AU-B	AI-W5.1-6P1-AU-B	AI-W5.1-7P1-AU-B	AI-W5.1-7.6P1-AU-B	AI-W5.1-8P1-AU-B	AI-W5.1-10P1-AU-B
Battery Input Data							
Battery Type	Lithium-ion						
Battery Voltage	40-60						
Max. Charging Current(A)	90	120	135	175	190	190	210
Max. Discharging Current(A)	90	120	135	175	190	190	210
Charging Strategy for Li-Ion Battery	Self-adaption to BMS						
Number of Battery Input	1						
PV String Input Data							
Max. PV access power(W)	7200	10000	12000	14000	15200	16000	20000
Max. PV Input Power(W)	5760	8000	9600	11200	12160	12800	16000
Max. PV Input Voltage(V)	500						
Start-up Voltage(V)	125						
PV Input Voltage Range(V)	125-500						
MPPT Voltage Range(V)	150-425						
Full Load MPPT Voltage Range(V)	300-425			200-425			250-425
Rated PV Input Voltage(V)	370						
Max. Operating PV Input Current(A)	18+18			32+32			
Max. Input Short-Circuit Current(A)	27+27			48+48			
No.of MPPT Trackers/No.of String MPPT Tracker	2/1+1			2/2+2			
Max. Inverter Backfeed Current to The Array	0						
AC Input/Output Data							
Rated AC Input/Output Active Power(W)	3600	5000	6000	7000	7600	8000	9999
Rated/Max. AC Input/Output Apparent Power(VA)	3600	5000	6000	7000	7600	8000	9999
Peak Power (off-grid)(W)	2 times of rated power, 10s						
Rated AC Input/Output Current(A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Max. AC Input/Output Current(A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Max. Continuous AC Passthrough (grid to load)(A)	35		40	50			
Max. Output Fault Current(A)	36	50	60	70	76	80	100
Max. Output Overcurrent Protection(A)	80			140			
Rated Input/Output Voltage/Range(V)	230V/240V 0.85Un-1.1Un						
Grid Connection Form	L+N+PE						
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz						
Power Factor Adjustment Range	0.8 leading-0.8 lagging						
Total Current Harmonic Distortion THDi	<3% (of nominal power)						
DC Injection Current	<0.5%In						
Generator Data							
Nominal Input Voltage(V)	230V/240V						
Rated Input Current(A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Power Factor	0.8 leading-0.8 lagging						
Frequency	50Hz						
Bcakup Data							
Nominal Output Voltage(V)	230V/240V						
Rated Output Current(A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Rated Apparent Power(VA)	3600	5000	6000	7000	7600	8000	9999
Power Factor	0.8 leading-0.8 lagging						
Frequency	50Hz						
Efficiency							
Max. Efficiency	97.60%						
Euro Efficiency	96.50%						
MPPT Efficiency	>99%						
Equipment Protection							
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Power Network Monitoring, Arc Fault Circuit Interrupter (AFCI) (optional), Anti-islanding Protection(Active Frequency shift),Earth Fault Detection, Island Protection Monitoring, Overvoltage Load Drop Protection, DC Input Switch, Residual Current (RCD) Detection						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
Interface							
Display	LCD+LED						
Communication Interface	RS232, RS485, CAN						
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN (optional)						
PV Connection	VP-D4						
General Data							
Operating Temperature Range	-40 to +60°C, >45°C Derating						
Permissible Ambient Humidity	0-100%						
Permissible Altitude	2000m						
Noise	<45 dB(A)						
Ingress Protection(IP) Rating	IP 65						
Inverter Topology	Non-Isolated (solar), Isolated (battery)						
Over Voltage Category	OVC II(DC), OVC III(AC)						
Protection Level	Class I						
Cabinet size(W*H*D) [mm]	720W×399.2H×256D (Excluding connectors and brackets)						
Weight(kg)	31.6						
Warranty	10 Years						
Type of Cooling	Intelligent Air Cooling						
Grid Regulation	AS/NZS 4777.2						
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4. IEC/EN 62109-1, IEC/EN 62109-2						



Model	Accessories Parts Description	Remark
AI-W5.1-B Module (individual package)	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-B+Base (individual package) (Optional 1)	Power Distribute Unit III (Included)	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 (Included)	The bottom support seat



Model : AI-W5.1-B (Battery Module)
Details : 5.12kWh, 720 × 255 × 300 (W × D × H, mm) , 55kg



Model : AI-W5.1-PDU3-B
Details : 720 × 255 × 228 (W × D × H, mm) , 15kg
Built-in Circuit Breaker: 250A 2P, 1000Vdc



Model : AI-W5.1-Base (Battery Base)
Details : 720 × 255 × 68 (W × D × H, mm) , 6.5kg



POWERING YOUR LIFE

