

# Technical Datasheet

## Model: INNO-A-5kW Series

### General Characteristic:

- **Integrated cabinet design with modular assembly for easier installation and replacement.**
- **User-friendly curved appearance with anti-collision features, combining aesthetics and safety. IP65 protection rating ensures greater reliability and security.**
- **Advanced protection mechanisms provide safer power usage for peace of mind. The stacked design allows for simpler connections and a more convenient user experience.**

<b>Inno-A-5kW Module Pack Technical Parameters</b>			
<b>No.</b>	<b>Item</b>	<b>Specification</b>	<b>Notes</b>
1	Product name	Inno Energy Li-ion Battery Module Pack	
2	Trademark	Inno Energy	
3	Array Mode	16S1P	
4	Nominal Capacity	100Ah, 5.12kWh	
5	Available Capacity	95Ah, 4.9kWh	
6	DC power	3.05kW	
7	Nominal Voltage	51.2V	
8	AC Impedance Resistance	≤ 8mΩ	
9	Max. Charge Voltage	57V	CC/CV
10	Actual charge voltage	56.4V~56.8V	
11	Min. Discharge Cut-off Voltage	41V	

12	Actual Discharge Cut-off Voltage	42.5~44.7V	
13	Std. Charge Current	50A	
14	Std. Discharge Current	50A	
15	Max. Charging Current	100A	25°C±2°C
16	Max. Discharge Current	100A	25°C±2°C
17	Storage Temperature	0°C ~35°C	
	Relative Humidity for Storage	65±20%	
18	Ambient Operating Temperature Range	Charge:-20~60°C Discharge: -20~60°C	>45°C Derating
19	Module Pack Cycling Performance	5,300 Cycles (Guaranteed to be used more than 5,300 times)	The Module Pack retains a capacity of 3.92 kWh (≥80% of the initial 4.9 kWh available capacity) by the end of the performance warranty period or 5,300 cycles, whichever comes first.
20	Single cell design cycle life	6,000 Cycles	
21	Module Pack Guaranteed Minimum Throughput Capacity	21.70MWh	
22	Max Depth of Discharge	96%	
23	Short Circuit Current	350A	
24	IP Rating	IP65	
25	DC isolator	Two poles circuit breaker	Comply with AS/NZS 60898 certified
26	Mounting environment	Indoor or outdoor	Mounting in accordance with AS/NZS 5139, details refer to the mounting manual

<b>Protection Characteristic:</b>			
<b>No.</b>	<b>Item</b>	<b>Specification</b>	<b>Notes</b>
1	Over / under voltage protection	Over / under voltage protection	The BMS is compliant with IEC 62619 standards.
2	Over current protection	Over current protection	The BMS is compliant with IEC 62619 standards.
3	Over / under temperature protection	Over / under temperature protection	The BMS is compliant with IEC 62619 standards.

### **Nominal Capacity and Available Capacity Test Condition:**

Under this Warranty prerequisites, the nominal capacity and available capacity is determined through the following testing method and conditions:

- **Ambient Temperature:**  $25 \pm 2^{\circ}\text{C}$
- **Discharge:** Apply a constant current of 0.5C until the battery reaches its minimum discharge voltage or self-protection voltage.
- **Rest Period:** Wait 10 minutes.
- **Charge:** Apply a constant current of 0.5C until the battery reaches its maximum charge voltage or self-protection voltage.
- **Rest Period:** Wait another 10 minutes.
- **Final Discharge:** Discharge again at a constant current of 0.5C until the minimum discharge or self-protection voltage is reached. Record the current, voltage, and discharge time.




The nominal capacity and available capacity are calculated as the integral of discharge time, current, and voltage.

<b>General Characteristic information:</b>			
<b>No.</b>	<b>Item</b>	<b>Specification</b>	<b>Notes</b>
1	Protection Degree	IP65(Wiring Compartment: IP54)	
2	Cooling	Forced ventilation	
3	Air cooled Fan Power Consumption (W)	0.72	
4	Operating Temperature Range (°C)	-20~60°C, >45°C Derating	
5	Max. relative humidity	Up to 95% Relative Humidity, non-condensing	
6	Max. altitude	< 2,000m (≥ 2000 m)	

		derating)	
7	Noise Level @ 1m	< 40dB	
8	Size (H*W*D mm)	660*630*220	
10	Battery Weight (kg)	71	
11	Installation	Wall-mounted or Floor mounted	

**Note:**

1. Measured at the battery AC output.
2. Refer to the battery warranty document for conditional application.

<b>Stackable Design:</b>			
<b>Model designation</b>	<b>INNO-A-5kW</b>	<b>INNO-A-10kW</b>	<b>INNO-A-15kW</b>
<b>Technical properties</b>	 1 Module	 2 Modules	 3 Modules
<b>Nominal capacity (kWh)</b>	5.12	10.24	15.36
<b>Available capacity (kWh)</b>	4.9	9.8	14.7
<b>Aggregate throughput (MWh)</b>	21.70	43.40	65.1
<b>Available Capacity by end of warranty</b>	3.92	7.84	11.76

<b>period or 5,300 cycles (kWh)</b>			
<b>Size (H*W*D mm)</b>	660*630*220	1140*630*220	1620*630*220
<b>Weight (kg)</b>	71	132	193

#### Inverter Compatibility Information

<b>No.</b>	<b>Brand</b>	<b>Specification</b>
1	Solis	S6-EH1P(3-6)K-L-PRO
2	Deye	SUN-5/6 18/10/12K-SG04LP3-EU