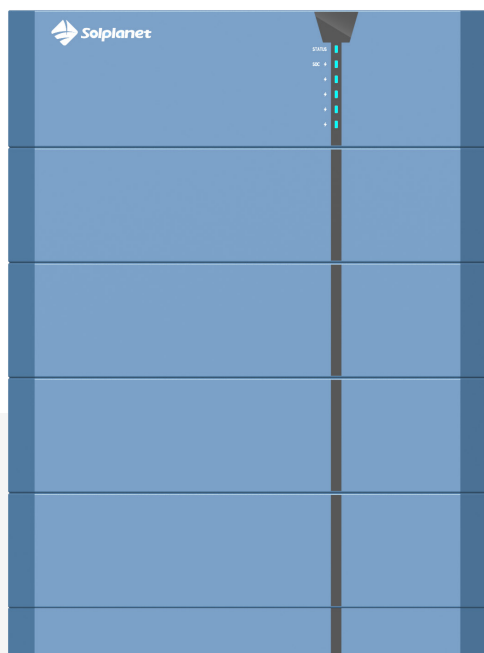


High Voltage Battery 5 to 20 kWh

# Ai-HB G2 Series



Models:

Ai-HB 050A

Ai-HB 075A

Ai-HB 100A

Ai-HB 125A

Ai-HB 150A

Ai-HB 175A

Ai-HB 200A



## Easy-to-install

- Modular design with plug-in connections
- Quick connections between battery and inverter
- Quick and easy-to-install with standard tools
- Steady and anti-dumping design



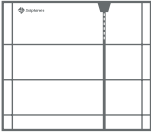
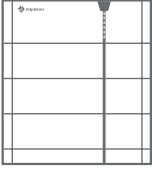
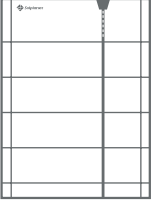
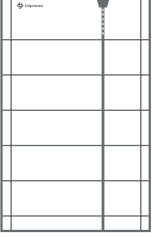
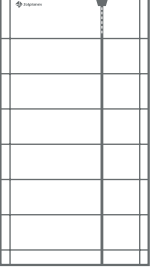
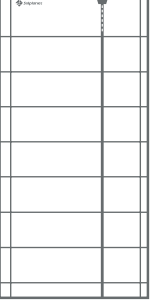
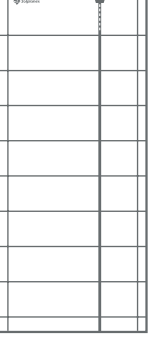
## Safe & reliable

- IP65 rated design for indoor and outdoor use
- Cell-level monitoring
- LFP safe technology



## User-friendly

- Stackable and expandable up to 163.84 kWh (supporting 8 modules per unit, 8 units in parallel)
- Multi-use applications: self-consumption, time of use tariffs, customisation
- Smart setup, commissioning and monitoring via Solplanet App

| Technical Datasheet |                                        | Ai-HB 050A                                                                                                                                                                                           | Ai-HB 075A                                                                        | Ai-HB 100A                                                                        | Ai-HB 125A                                                                        | Ai-HB 150A                                                                          | Ai-HB 175A                                                                          | Ai-HB 200A                                                                          |
|---------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| System Data         | Battery designation                    |                                                                                                                     |  |  |  |  |  |  |
|                     | Battery module                         | HB051050A                                                                                                                                                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Cell type                              | LiFePO4                                                                                                                                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Module quantity                        | 2 <sup>5</sup>                                                                                                                                                                                       | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                   | 7                                                                                   | 8                                                                                   |
|                     | Rated capacity                         | 50 Ah                                                                                                                                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Nominal energy <sup>1</sup>            | 5.12 kWh                                                                                                                                                                                             | 7.68 kWh                                                                          | 10.24 kWh                                                                         | 12.8 kWh                                                                          | 15.36 kWh                                                                           | 17.92 kWh                                                                           | 20.48 kWh                                                                           |
|                     | Usable energy <sup>2</sup>             | 4.60 kWh                                                                                                                                                                                             | 6.91 kWh                                                                          | 9.21 kWh                                                                          | 11.52 kWh                                                                         | 13.82 kWh                                                                           | 16.12 kWh                                                                           | 18.43 kWh                                                                           |
|                     | Nominal voltage                        | 102.4 V                                                                                                                                                                                              | 153.6 V                                                                           | 204.8 V                                                                           | 256 V                                                                             | 307.2 V                                                                             | 358.4 V                                                                             | 409.6 V                                                                             |
|                     | Battery voltage range                  | 80 V - 116.8 V                                                                                                                                                                                       | 120 V - 175.2 V                                                                   | 160 V - 233.6 V                                                                   | 200 V - 292 V                                                                     | 240 V - 350.4 V                                                                     | 280 V - 408.8 V                                                                     | 320 V - 467.2 V                                                                     |
|                     | Recommended charge / discharge current | 25 A / 30 A                                                                                                                                                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Max. charge / discharge current        | 25 A / 30 A                                                                                                                                                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Rated charge / discharge power         | 2.56 kW                                                                                                                                                                                              | 3.84 kW                                                                           | 5.12 kW                                                                           | 6.40 kW                                                                           | 7.68 kW                                                                             | 8.86 kW                                                                             | 10.24 kW                                                                            |
| General Data        | Max.charging power                     | 2.56 kW                                                                                                                                                                                              | 3.84 kW                                                                           | 5.12 kW                                                                           | 6.40 kW                                                                           | 7.68 kW                                                                             | 8.86 kW                                                                             | 10.24 kW                                                                            |
|                     | Max.discharge power                    | 3.08 kW                                                                                                                                                                                              | 4.61 kW                                                                           | 6.14 kW                                                                           | 7.68 kW                                                                           | 9.22 kW                                                                             | 10.75 kW                                                                            | 12.29 kW                                                                            |
|                     | Dimensions (W / D / H)                 | 540 / 390 / 470 mm                                                                                                                                                                                   | 540 / 390 / 600 mm                                                                | 540 / 390 / 730 mm                                                                | 540 / 390 / 860 mm                                                                | 540 / 390 / 990 mm                                                                  | 540 / 390 / 1120 mm                                                                 | 540 / 390 / 1250 mm                                                                 |
|                     | Weight                                 | 76.0 kg                                                                                                                                                                                              | 106.5 kg                                                                          | 137.0 kg                                                                          | 167.5 kg                                                                          | 198.0 kg                                                                            | 228.5 kg                                                                            | 259.0 kg                                                                            |
|                     | Battery module weight                  | 30.5 kg                                                                                                                                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Installation location                  | Indoor / Outdoor                                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Mounting method                        | Floor mounted                                                                                                                                                                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Operating temperature range            | Charge: 0 °C ~ 50 °C<br>Discharge: -20 °C ~ 55 °C                                                                                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Storage temperature range              | -20 °C ~ 45 °C                                                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Cooling concept                        | Natural convection                                                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Degree of protection                   | IP65                                                                                                                                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Relative humidity                      | 5 % - 95 % (Non - condensing)                                                                                                                                                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Max. operating altitude                | 3000 m (> 2000 m derating)                                                                                                                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Communication                          | CAN                                                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Certificate                            | IEC 62619, EN 61000, IEC 62040, UN38.3                                                                                                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Cycle life <sup>3</sup>                | 6000 times                                                                                                                                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Protection                             | Charging over-voltage protection, discharging under-voltage protection, over-current protection, over-temperature protection, short-circuit protection, built-in fire suppression <sup>4</sup> , etc |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                     | Round-trip efficiency                  | ≥ 95 %                                                                                                                                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |

- Nominal energy is defined under the following conditions: cell voltage 2.5 V - 3.65 V, 0.5C charge & discharge at 25°C.
- Usable energy is defined under the following conditions: 0.5C charge & discharge at 25°C, 90% DOD. Usable energy may vary depending on discharge, charge, environmental conditions and SOC % limits defined by the user.
- Cycle life is defined under the following conditions: 0.5C charge & discharge at 25°C, 90% DOD, 70% EOL
- Available with or without built-in fire suppression functionality, this feature was released in August 2024, please confirm version with Solplanet sales before purchase.
- When using only 2 modules (5.12 kWh), please ensure that the maximum operating voltage of the inverter's photovoltaic system is not higher than 750 V.

\* Battery towers of different series or models cannot be used in parallel.

