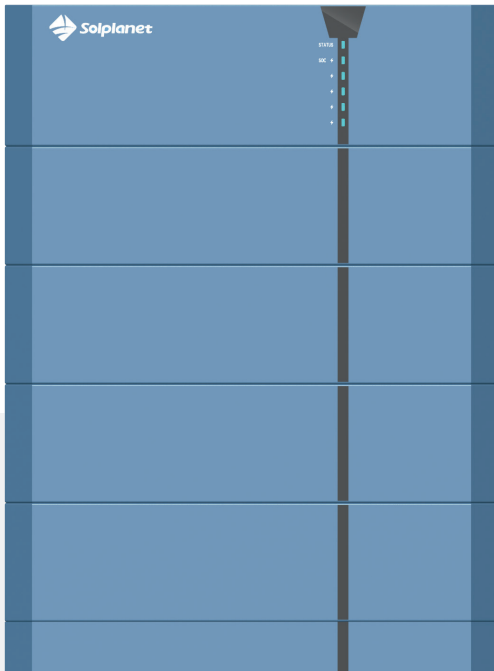


High Voltage Battery 7.5 to 20 kWh

# Ai-HB G2 Pro Series



Models:

Ai-HB Pro 075A

Ai-HB Pro 150A

Ai-HB Pro 100A

Ai-HB Pro 175A

Ai-HB Pro 125A

Ai-HB Pro 200A



## Optimal performance

- Up to 1C charge / discharge rate
- Stackable and expandable up to 81.92 kWh (supporting 8 modules per unit, 4 units in parallel)
- IP65 rated design for indoor and outdoor use
- Multi-use applications: self-consumption, time of use tariffs, customisation



## Safe & reliable

- VDE-compliant with enhanced protection
- Smarter and safer battery management system for precise diagnostics
- LFP safe technology with long lifespan
- Built-in emergency fire suppression module



## User-friendly

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

# Technical Datasheet

Ai-HB Pro 075A

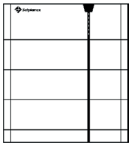
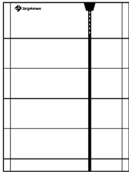
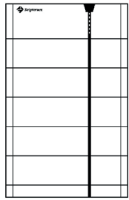
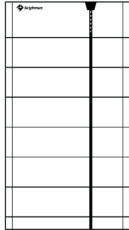
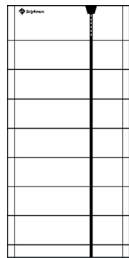
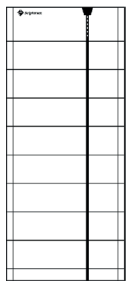
Ai-HB Pro 100A

Ai-HB Pro 125A

Ai-HB Pro 150A

Ai-HB Pro 175A

Ai-HB Pro 200A

|              |                                    |                                                                                                                                                                                        |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|--------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| System Data  | Battery designation                |                                                                                                       |  |  |  |  |  |
|              | Battery module                     | HB051050B                                                                                                                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Cell type                          | LiFePO4                                                                                                                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Module quantity                    | 3                                                                                                                                                                                      | 4                                                                                 | 5                                                                                 | 6                                                                                   | 7                                                                                   | 8                                                                                   |
|              | Rated capacity                     | 50 Ah                                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Nominal energy <sup>1</sup>        | 7.68 kWh                                                                                                                                                                               | 10.24 kWh                                                                         | 12.8 kWh                                                                          | 15.36 kWh                                                                           | 17.92 kWh                                                                           | 20.48 kWh                                                                           |
|              | Usable energy <sup>2</sup>         | 7.29 kWh                                                                                                                                                                               | 9.72 kWh                                                                          | 12.16 kWh                                                                         | 14.59 kWh                                                                           | 17.02 kWh                                                                           | 19.45 kWh                                                                           |
|              | Nominal voltage                    | 153.6 V                                                                                                                                                                                | 204.8 V                                                                           | 256.0 V                                                                           | 307.2 V                                                                             | 358.4 V                                                                             | 409.6 V                                                                             |
|              | Operating voltage range            | 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                                                                     |
|              | Max.charging current               | 50 A                                                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Max.discharging current            | 50 A                                                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Rated charging / discharging power | 7.68kW                                                                                                                                                                                 | 10.24kW                                                                           | 12.8 kW                                                                           | 15.36 kW                                                                            | 17.92 kW                                                                            | 20.48 kW                                                                            |
|              | Max.charging power                 | 7.68kW                                                                                                                                                                                 | 10.24kW                                                                           | 12.8 kW                                                                           | 15.36 kW                                                                            | 17.92 kW                                                                            | 20.48 kW                                                                            |
|              | Max.discharging power              | 7.68kW                                                                                                                                                                                 | 10.24kW                                                                           | 12.8 kW                                                                           | 15.36 kW                                                                            | 17.92 kW                                                                            | 20.48 kW                                                                            |
| General Data | Dimensions (W / D / H)             | 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                             | 109.0 kg                                                                                                                                                                               | 140.0 kg                                                                          | 171.0 kg                                                                          | 202.0 kg                                                                            | 233.0 kg                                                                            | 264.0 kg                                                                            |
|              | Battery module weight              | 31.0 kg                                                                                                                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Installation location              | Indoor / Outdoor                                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Mounting method                    | Floor mounted                                                                                                                                                                          |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Operating temperature range        | Charge: 2 °C ~ 58 °C<br>Discharge: -28 °C ~ 58 °C                                                                                                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Storage temperature range          | -20 °C ~ 45 °C                                                                                                                                                                         |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Cooling concept                    | Natural convection                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Degree of protection               | IP65                                                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Relative humidity                  | 5 ~ 95 %, non - condensing                                                                                                                                                             |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Communication                      | CAN                                                                                                                                                                                    |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Protection                         | Charging over-voltage protection, discharging under-voltage protection, over-current protection, over-temperature protection, short-circuit protection, built-in fire suppression, etc |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Certification                      | IEC62619 / EN61000 / VDE2510-50<br>IEC62040 / UN38.3                                                                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Life cycle <sup>3</sup>            | 8000 times                                                                                                                                                                             |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|              | Round-trip efficiency              | ≥95%                                                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |

1. Nominal energy is defined under the following conditions: cell voltage 2.5~3.65V, 0.5C charge / discharge at +25°C.

2. Usable energy is defined under the following conditions: 95% DOD, 0.5C charge / discharge at +25°C. Usable energy may vary depending on discharge, charge, environmental conditions and SOC % limits defined by the user.

3. Life cycle is defined under the following conditions: 90% DOD, 70% EOL, 0.2C charge / discharge at +25°C.

