

# HS3 Single Phase All-in-One Solution

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SAJ's latest all-in-one solution for residential energy storage system, integrated PCS, BMS, EMS, EV charger and battery, with plug-in play design, IP65 design and only 12 screws, making the installation a lot easier.



- ❑ Integrated with 7kW EV charger module
- ❑ Max. 20A input current to better match high power panel
- ❑ Battery module integrated with a DC/DC optimiser, expandable whenever you need
- ❑ Plug-in connection of the modules without any cabling, easy installation
- ❑ 170mm thick, blend in with its surrounding
- ❑ Self-heating and fire-protection system inside the battery

HS3-6K-S2-W/G-PX-IE

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| Module                                    | HS3-6K-S2-W/G-PX-IE                                                                                                                                                                                           |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DC Input</b>                           |                                                                                                                                                                                                               |
| Max. PV Array Power [Wp]@STC              | 12000                                                                                                                                                                                                         |
| Max. DC Voltage [V]                       | 600                                                                                                                                                                                                           |
| MPPT Voltage Range [V]                    | 90~550                                                                                                                                                                                                        |
| Rated DC Voltage [V]                      | 360                                                                                                                                                                                                           |
| Start Voltage [V]                         | 100                                                                                                                                                                                                           |
| Max. DC Input Current [A]                 | 20/20                                                                                                                                                                                                         |
| Max. DC Short Circuit Current [A]         | 25/25                                                                                                                                                                                                         |
| No. of MPPT                               | 2                                                                                                                                                                                                             |
| <b>AC Output/Input [On-grid]</b>          |                                                                                                                                                                                                               |
| Rated AC Power [W]                        | 5750                                                                                                                                                                                                          |
| Max. Apparent Power [VA]                  | 5750                                                                                                                                                                                                          |
| Rated Output Current [A]@230Vac           | 25                                                                                                                                                                                                            |
| Max. Output Current [A]                   | 25                                                                                                                                                                                                            |
| Max. Input Current [A]@230Vac             | 54.5                                                                                                                                                                                                          |
| Rated AC Voltage/Range [V]                | L+N+PE, 220, 230, 240/180 ~ 280                                                                                                                                                                               |
| Rated Output Frequency/Range [Hz]         | 50, 60/45 ~ 55, 55 ~ 65                                                                                                                                                                                       |
| Power Factor [cos φ]                      | 0.8 leading ~ 0.8 lagging                                                                                                                                                                                     |
| Total Harmonic Distortion [THDi]          | <3%                                                                                                                                                                                                           |
| <b>Battery Parameters</b>                 |                                                                                                                                                                                                               |
| Battery Type                              | LiFePO4                                                                                                                                                                                                       |
| Battery Voltage Range[V]                  | 380 ~ 500                                                                                                                                                                                                     |
| Max. Charging/Discharging Current [A]     | 15.8/16                                                                                                                                                                                                       |
| Scalability                               | BU3-5.0-TV2-PRO (up to 8 battery modules)                                                                                                                                                                     |
| <b>AC Output [Back-up]</b>                |                                                                                                                                                                                                               |
| Rated Output Power [W]                    | 5750                                                                                                                                                                                                          |
| Peak Output Apparent Power [VA]           | 7200,60s                                                                                                                                                                                                      |
| Rated AC Voltage/Range [V]                | L+N+PE, 220,230,240/180 ~ 280                                                                                                                                                                                 |
| Rated Output Frequency/Range [Hz]         | 50,60/45 ~ 55,55 ~ 65                                                                                                                                                                                         |
| Output THDv (@ Linear Load)               | <3%                                                                                                                                                                                                           |
| <b>Efficiency</b>                         |                                                                                                                                                                                                               |
| Max. Efficiency                           | 97.6%                                                                                                                                                                                                         |
| Euro Efficiency                           | 97.2%                                                                                                                                                                                                         |
| <b>Protection</b>                         |                                                                                                                                                                                                               |
| Battery Input Reverse Polarity Protection | Integrated                                                                                                                                                                                                    |
| Over load Protection                      | Integrated                                                                                                                                                                                                    |
| AC Short Circuit Current Protection       | Integrated                                                                                                                                                                                                    |
| AC Overcurrent Protection                 | Integrated                                                                                                                                                                                                    |
| AC Overvoltage Protection                 | Integrated                                                                                                                                                                                                    |
| DC Surge Protection                       | Type II                                                                                                                                                                                                       |
| AC Surge Protection                       | Type II                                                                                                                                                                                                       |
| Anti-islanding Protection                 | Integrated                                                                                                                                                                                                    |
| AFCI Protection                           | Integrated                                                                                                                                                                                                    |
| <b>Interface</b>                          |                                                                                                                                                                                                               |
| PV Connection                             | MC4/D4                                                                                                                                                                                                        |
| AC Connection                             | Plug-in connector                                                                                                                                                                                             |
| Battery Connection                        | Quick connector                                                                                                                                                                                               |
| Display                                   | LED+APP                                                                                                                                                                                                       |
| Communication                             | Wi-Fi/Ethernet/4G(Optional)                                                                                                                                                                                   |
| <b>General Parameters</b>                 |                                                                                                                                                                                                               |
| Topology                                  | Non-isolated                                                                                                                                                                                                  |
| Operating Temperature Range               | -30°C ~ +50°C                                                                                                                                                                                                 |
| Cooling Method                            | Natural Convection                                                                                                                                                                                            |
| Relative Humidity Range                   | 0~100% Non-condensing                                                                                                                                                                                         |
| Max. Operating Altitude [m]               | 3000                                                                                                                                                                                                          |
| Noise [dBA]                               | <35                                                                                                                                                                                                           |
| Ingress Protection                        | IP65                                                                                                                                                                                                          |
| Inverter Dimensions [H*W*D] [mm]          | 400*695*170                                                                                                                                                                                                   |
| Battery Dimensions [H*W*D] [mm]           | 420*695*170                                                                                                                                                                                                   |
| Inverter Weight [kg]                      | 27.5                                                                                                                                                                                                          |
| Battery Weight [kg]                       | 53.0                                                                                                                                                                                                          |
| Standard                                  | EN 62109-1/2, EN 61000-6-2/4, EN 50438, EN 50549, C10/11, IEC 62116, IEC 61727, RD 1699, RD 413, UNE 206006, UNE 206007, NTS, CEI 0-16, CEI 0-21, AS 4777.2, NBR 16149, NBR 16150 VDE-AR-N 4105, VDE 0126-1-1 |
| <b>Charger Model</b>                      |                                                                                                                                                                                                               |
| <b>CU2-7.4K-S-I</b>                       |                                                                                                                                                                                                               |
| Output Voltage [V AC]                     | 230, ± 20%                                                                                                                                                                                                    |
| Max. output Current [A]                   | 32                                                                                                                                                                                                            |
| Rated Output Power [kW]                   | 7                                                                                                                                                                                                             |
| Power Consumption (standby) [W]           | 7                                                                                                                                                                                                             |
| Dimension [mm] [H*W*D]                    | 160*695*170                                                                                                                                                                                                   |
| Weight [kg]                               | 9                                                                                                                                                                                                             |
| Working Temperature                       | -30°C to +50°C                                                                                                                                                                                                |
| Ambient Humidity                          | 5~95% non-condensing                                                                                                                                                                                          |

**Notes:** Meaning of letters in model numbers and data sheets: W=Wi-Fi G=4G B=Basic model P=Professional model.