

HS2/AS2 Single Phase All-in-One Solution

SAJ's first all-in-one solution for residential energy storage system, integrated PCS, BMS and battery, with module and IP65 design, no external wire, suitable for outdoor easy installation. HS2 covers from 3-6kW, 2 MPPTs and single phase grid.



- ❑ AC retrofit & easy installation
- ❑ Max 16A input current to better match high power panel
- ❑ Modular design and expandable up to 20.0kWh
- ❑ With UPS function switch time $\leq 10\text{ms}$
- ❑ IP65 outdoor design
- ❑ AFCI integrated(optional), RSD supported(optional)

HS2-3K-S2-X | HS2-3.6K-S2-X | HS2-4K-S2-X
HS2-4.6K-S2-X | HS2-5K-S2-X
HS2-5K-S2-B-X | HS2-6K-S2-X

| MODEL | HS2-3K-S2-X | HS2-3.6K-S2-X | HS2-4K-S2-X | HS2-4.6K-S2-X | HS2-5K-S2-X | HS2-5K-S2-B-X | HS2-6K-S2-X |
|---|--|---------------|-------------|---|-------------|---------------|-------------|
| DC Input | | | | | | | |
| Max. PV Array Power [Wp]@ STC | 4500 | 5400 | 6000 | 6900 | 7500 | 7500 | 9000 |
| Max. DC Voltage [V] | | | | 550 | | | |
| MPPT Voltage Range [V] | | | | 90 ~ 500 | | | |
| Rated DC Voltage [V] | | | | 360 | | | |
| Start Voltage [V] | | | | 100 | | | |
| Max. DC Input Current [A] | | | | 16/16 | | | |
| Max. DC Short Circuit Current [A] | | | | 19.2/19.2 | | | |
| No. of MPPT | | | | 2 | | | |
| Battery Parameters | | | | | | | |
| Battery Type | | | | LiFePO4 | | | |
| Battery Voltage Range [V] | | | | 85 ~ 450 | | | |
| Max. Charging/ Discharging Current [A] | | | | 30/30 | | | |
| Scalability | | | | BU2-5.0-HV1/5 (up to 4 battery modules) | | | |
| AC Output [On-grid] | | | | | | | |
| Rated AC Power [W] | 3000 | 3680 | 4000 | 4600 | 5000 | 5000 | 6000 |
| Max. Apparent Power [VA] | 3300 | 3680 | 4400 | 4600 | 5500 | 5000 | 6000 |
| Rated Output Current [A]@ 230Vac | 13.0 | 16.0 | 17.4 | 20.0 | 21.7* | 21.7 | 26.1 |
| Max. Output Current [A] | 15.0 | 16.0 | 20.0 | 20.0 | 25.0 | 22.7 | 27.3 |
| Current Inrush [A] | | | | 100.0 | | | |
| Max. AC Fault Current [A] | | | | 55.0 | | | |
| Max. AC Over Current Protection [A] | | | | 55.0 | | | |
| 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% | | | |
| AC Input [On-grid] | | | | | | | |
| Rated AC Voltage/ Range [V] | | | | L+N+PE, 220,230,240/180 ~ 280 | | | |
| Rated Input Frequency [Hz] | | | | 50,60 | | | |
| Max. Input Current [A]@ 230Vac | 26.1 | 32.0 | 34.8 | 40.0 | 43.5 | 43.5 | 52.2 |
| AC Output [Back-up] | | | | | | | |
| Max. Output Power [VA] | 3000 | 3680 | 4000 | 4600 | 5000 | 5000 | 6000 |
| Max. Output Current [A] | 13.6 | 16.7 | 18.2 | 20.9 | 22.7 | 22.7 | 27.3 |
| Peak Output Apparent Power [VA] | 3600,60s | 4416,60s | 4800,60s | 5520,60s | 6000,60s | 6000,60s | 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% | | | |
| Efficiency | | | | | | | |
| Max. Efficiency | | | | 97.6% | | | |
| Euro Efficiency | | | | 97.0% | | | |
| Protection | | | | | | | |
| Battery Input Reverse Polarity Protection | | | | Integrated | | | |
| Over load Protection | | | | Integrated | | | |
| AC Short Circuit Current Protection | | | | Integrated | | | |
| DC Surge Protection | | | | Integrated | | | |
| AC Surge Protection | | | | Integrated | | | |
| Anti-islanding Protection | | | | Integrated | | | |
| AFCI Protection | | | | Optional | | | |
| RSD Protection | | | | Optional | | | |
| Interface | | | | | | | |
| PV Connection | | | | MC4/D4 | | | |
| AC Connection | | | | Plug-in connector | | | |
| Battery Connection | | | | Quick connector | | | |
| Display | | | | LED+APP | | | |
| Communication | | | | Wi-Fi/Ethernet/4G (Optional) | | | |
| General Parameters | | | | | | | |
| Topology | | | | Non-isolated | | | |
| Operating Temperature Range | | | | -10°C to +50°C (>45°C derating) | | | |
| Cooling Method | | | | Natural Convection | | | |
| Ambient Humidity | | | | 0-100% Non-condensing | | | |
| Altitude | | | | 4000m (>3000m Power Derating) | | | |
| Noise [dBA] | | | | <35 | | | |
| Ingress Protection | | | | IP65 | | | |
| Dimensions [H*W*D] [mm] | | | | 354*626*365 | | | |
| Weight [kg] | | | | 25 | | | |
| Warranty [Year] | | | | 10 | | | |
| 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 | | | | | | |

Remarks: *1 According to VDE-ARN-N 4105, Rated AC Current for HS2-5K-S2 is 20A.