

HS3 Single Phase All-in-One Solution

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. HS3 covers from 3-6kW, 2 MPPTs and single phase grid.



- ❑ 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

HS3-3K-S2-W/G-PX | HS3-3.6K-S2-W/G-PX
HS3-4K-S2-W/G-PX | HS3-4.6K-S2-W/G-PX
HS3-5K-S2-W/G-PX | HS3-6K-S2-W/G-PX

Module	HS3-3K-S2-W/G-PX	HS3-3.6K-S2-W/G-PX	HS3-4K-S2-W/G-PX	HS3-4.6K-S2-W/G-PX	HS3-5K-S2-W/G-PX	HS3-6K-S2-W/G-PX
DC Input						
Max. PV Array Power [Wp]@STC	6000	7200	8000	9200	10000	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		
AC Output/Input [On-grid]						
Rated AC Power [W]	3000	3600	4000	4600	5000***	6000*
Max. Apparent Power [VA]	3300	3600	4400	4600	5500***	6000*
Rated Output Current [A]@230Vac	13.0	15.7	17.4	20.0	21.7	26.1**
Max. Output Current [A]	14.3	15.7	19.1	20.0	23.9***	27.3**
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%		
Battery Parameters						
Battery Type				LiFePO4		
Battery Voltage Range[V]				380 ~ 500		
Max. Charging/Discharging Current [A]	15.8/9.2	15.8/10	15.8/12.4	15.8/12.9	15.8/15.2***	15.8/16.8**
Scalability				BU3-5.0-TV2-PRO (up to 8 battery modules)		
AC Output [Back-up]						
Rated Output Power [W]	3000	3680	4000	4600	5000***	6000
Peak Output Apparent Power [VA]	3600,60s	4416,60s	4800,60s	5520,60s	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				97.2%		
Protection						
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		
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				-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, G98, G99, G100, G98NI, G99NI		
Charger Model						
				CU2-7.4K-S-I		
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		

* For Ireland HS3-6K-S2-W/4G-P Rated AC Power [W] and Max.Apparent Power [VA] is 5750.

** For Ireland HS3-6K-S2-W/4G-P Rated Output Current [A] @230Vac and Max. Output Current [A] is 25, Max.Discharging Current [A] is 16.

*** For Australia HS3-5K-S2-W/4G-P Rated AC Power [W] and Max.Apparent Power [VA] is 4999, HS3-5K-S2-W/4G-P Max. Output Current [A] is 21.7, Max.Discharging Current [A] is 13.9A.

*** For Belgium HS3-5K-S2-W/4G-P Max.Apparent Power [VA] is 5000, HS3-5K-S2-W/4G-P Max. Output Current [A] is 21.7, Max.Discharging Current [A] is 13.9A.