

HS3/AS3 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					
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.