

# 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

HS3-5K-S2-W/G-P/BX-BE  
HS3-6K-S2-W/G-P/BX-IE

Module	HS3-5K-S2-W/G-P/BX-BE	HS3-6K-S2-W/G-P/BX-IE
<b>DC Input</b>		
Max. PV Array Power [Wp]@STC	P:10000 B:7500	P:12000 B:9000
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]		P:20/20 B:16/16
Max. DC Short Circuit Current [A]		P:25/25 B:20/20
No. of MPPT		2
<b>AC Output/Input [On-grid]</b>		
Rated AC Power [W]	5000	5750
Max. Apparent Power [VA]	5000	5750
Rated Output Current [A]@230Vac	21.7	25
Max. Output Current [A]	21.7	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]	15.8/13.9	15.8/16
Scalability		BU3-5.0-TV2-PRO (up to 8 battery modules)
<b>AC Output [Back-up]</b>		
Rated Output Power [W]	5000	5750
Peak Output Apparent Power [VA]	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%
<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		P:Type II B:Type III
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		P:-30°C ~ +50°C B:Charging: 0°C to 50°C Discharging: -10°C to +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>		
		CU2-74K-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

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