

# HS3 Single Phase All-in-One Solution

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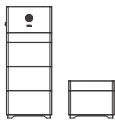
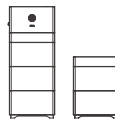
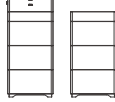
SAJ's latest all-in-one solution for residential energy storage system, integrated PCS, BMS, EMS, EV charger and battery, with plug-in play design, IP65 design and only 12 screws, making the installation a lot easier. HS3 covers from 3-6kW, 2 MPPTs and single phase grid.



- ❑ 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

HS3-3-6K-S2-W/G-P1 | HS3-3-6K-S2-W/G-P2  
HS3-3-6K-S2-W/G-P3 | HS3-3-6K-S2-W/G-P4  
HS3-3-6K-S2-W/G-P5 | HS3-3-6K-S2-W/G-P6

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System Model	HS3-3-6K-S2-W/G-P1	HS3-3-6K-S2-W/G-P2	HS3-3-6K-S2-W/G-P3	HS3-3-6K-S2-W/G-P4	HS3-3-6K-S2-W/G-P5	HS3-3-6K-S2-W/G-P6	
System Diagram							
Rated Output [W]	3000-6000						
EV Charging Power [W]	7000						
Number of Battery Modules	1	2	3	4	5	6	
Nominal Energy [kWh]	5.0	10.0	15.0	20.0	25.0	30.0	
Ingress Protection	IP65						
Operating Temperature Range	-30°C ~ +50°C						
Relative Humidity Range	5-95%						
Max. Operating Altitude [m]	2000						
Dimensions [H*W*D] [mm]	980*695*170	1350*695*170	1720*695*170	1720*695*170 520*695*170	1720*695*170 890*695*170	1720*695*170 1260*695*170	
<b>Inverter Model</b>							
Model	HS3-3K-S2-W/G-P	HS3-3.6K-S2-W/G-P	HS3-4K-S2-W/G-P	HS3-4.6K-S2-W/G-P	HS3-5K-S2-W/G-P	HS3-6K-S2-W/G-P	HS3-6K-S2-W/G-P-IE
<b>DC Input</b>							
Max. PV Array Power [Wp]@STC	6000	7200	8000	9200	10000	12000	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]	3000	3600	4000	4600	5000	6000	5750
Max. Apparent Power [VA]	3300	3600	4400	4600	5500	6000	5750
Rated Output Current [A]@230Vac	13.0	15.7	17.4	20.0	21.7	26.1	25
Max. Output Current [A]	14.3	15.7	19.1	20.0	23.9	27.3	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]	15.8/9.2	15.8/10	15.8/12.4	15.8/12.9	15.8/15.2	15.8/16.8	15.8/16
Scalability	BU3-5.0-TV2-PRO (up to 8 battery modules)						
<b>AC Output [Back-up]</b>							
Rated Output Power [W]	3000	3680	4000	4600	5000	6000	6000
Peak Output Apparent Power [VA]	3600,60s	4416,60s	4800,60s	5520,60s	6000,60s	7200,60s	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	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						
Dimensions [H*W*D] [mm]	400*695*170						
Weight [kg]	27.5						
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						