

HS3 Three 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 3-12kW, 2 MPPTs and three phase grid.



- ❑ Integrated with 11kW 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
- ❑ Supported 100% three phase voltage imbalance
- ❑ 170mm thick, blend in with its surrounding
- ❑ Self-heating and fire-protection system inside the battery

HS3-3-4K-T2-W/G-P1 | HS3-3-4K-T2-W/G-P2
HS3-3-4K-T2-W/G-P3 | HS3-3-4K-T2-W/G-P4
HS3-3-4K-T2-W/G-P5

System Model	HS3-3-4K-T2-W/G-P1	HS3-3-4K-T2-W/G-P2	HS3-3-4K-T2-W/G-P3	HS3-3-4K-T2-W/G-P4	HS3-3-4K-T2-W/G-P5
System Diagram					
Rated Output [W]			5000-12000		
EV Charging Power [W]			11000		
Number of Battery Modules	1	2	3	4	5
Nominal Energy [kWh]	5.0	10.0	15.0	20.0	25.0
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]	1030*695*170	1400*695*170	1770*695*170	1770*695*170 520*695*170	1770*695*170 890*695*170
Inverter Module					
Module	HS3-3K-T2-W/G-P			HS3-4K-T2-W/G-P	
DC Input					
Max. PV Array Power [Wp]@STC	6000			8000	
Max. DC Voltage [V]				1000	
MPPT Voltage Range [V]				180 ~ 900	
Rated DC Voltage [V]				600	
Start Voltage [V]				180	
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			4000	
Max. Apparent Power [VA]	3300			4400	
Rated Output Current [A]@230Vac	4.4			5.8	
Max. Output Current [A]	4.8			6.4	
Max. Input Current [A]@230Vac				29.0	
Rated AC Voltage/Range [V]				3L+N+PE, 220/380, 230/400, 240/415; 180 ~ 280/312 ~ 485	
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]	30/9.2			30/12.4	
Scalability				BU3-5.0-TV2-PRO (up to 8 battery modules)	
AC Output [Back-up]					
Rated Output Power [W]	3000			4000	
Peak Output Apparent Power [VA]	6000,60s			8000,60s	
Rated AC Voltage/Range [V]				3L+N+PE, 220/380, 230/400, 240/415; 180 ~ 280/312 ~ 485	
Rated Output Frequency/Range [Hz]				50,60/45 ~ 55,55 ~ 65	
Output THDv (@ Linear Load)				<3%	
Efficiency					
Max. Efficiency				98.0%	
Euro Efficiency				97.6%	
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	
Dimensions [H*W*D] [mm]				450*695*170	
Weight [kg]				34	
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				