

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 6–12kW, 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
- Built-Inside WiFi Module

HS3-6K-T2-W/G-P | HS3-8K-T2-W/G-P
HS3-10K-T2-W/G-P | HS3-12K-T2-W/G-P

Module	HS3-6K-T2-W/G-P	HS3-8K-T2-W/G-P	HS3-10K-T2-W/G-P	HS3-12K-T2-W/G-P
DC Input				
Max. PV Array Power [Wp]@STC	12000	12000	15000	15000
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]	6000	8000	10000	12000*
Max. Apparent Power [VA]	6600	8800	11000	12000*
Rated Output Current [A]@230Vac	8.7	11.6	14.5	17.4**
Max. Output Current [A]	9.6	12.8	15.9	17.4**
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]	30/18.4	30/25	30/30	30/30
Scalability	BU3-5.0-TV2-PRO (up to 8 battery modules)			
AC Output [Back-up]				
Rated Output Power [W]	6000	8000	10000	12000
Peak Output Apparent Power [VA]	9000,60s	12000,60s	15000,60s	15000,60s
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			

* For Ireland HS3-12K-T2-W/G-P Rated AC Power(W) and Max.Apparent Power(VA) is 11000 ** For Ireland HS3-12K-T2-W/G-P Rated Output Current(A) @230Vac and Max. Output Current(A) is 15.9