HS3/AS3 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 5-12kW, 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

HS3-10K-T2-W/G-P/BX-BE
HS3-12K-T2-W/G-P/BX-IE

Module	HS3-10K-T2-W/G-P/BX-BE	HS3-12K-T2-W/G-P/BX-IE
DC Input		
Max. PV Array Power [Wp]@STC	P/B:15000	P/B: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]	P:20/20 B:16/16	
Max. DC Short Circuit Current [A]	P:25/25 B:20/20	
No. of MPPT	2	
AC Output/Input [On-grid]		
Rated AC Power [W]	10000	11000
Max. Apparent Power [VA]	10000	11000
Rated Output Current [A]@230Vac	14.5	15.9
Max. Output Current [A]	14.5	15.9
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]	30/30	30/30
Scalability	BU3-5.0-TV2-PRO (up to 8 battery modules)	
AC Output [Back-up]		
Rated Output Power [W]	10000	11000
Peak Output Apparent Power [VA]	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	P:Type II B:Type III	
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	P:-30℃ ~ +50℃ B:Charging: 0℃ to 50℃ Discharging: -10℃ to +50℃	
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]	450*695*170	
Battery Dimensions [H*W*D] [mm]	420*695*170	
Inverter Weight [kg]	34	
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	**CU2-11K-T-I**	
Output Voltage [V AC]	400, ± 20%	
Max. output Current [A]	16	
Rated Output Power [kW]	11	
Power Consumption (standby) [W]	5	
Dimension [mm] [H*W*D]	160*695*170	
Weight [kg]	9	
Working Temperature	-30℃ to +50℃	
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