

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

HS3-5K-T2-W/G-PX | HS3-6K-T2-W/G-PX
HS3-8K-T2-W/G-PX | HS3-10K-T2-W/G-PX
HS3-12K-T2-W/G-PX

Module	HS3-5K-T2-W/G-PX	HS3-6K-T2-W/G-PX	HS3-8K-T2-W/G-PX	HS3-10K-T2-W/G-PX	HS3-12K-T2-W/G-PX
DC Input					
Max. PV Array Power [Wp]@STC	10000	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]	5000	6000	8000	10000	12000*
Max. Apparent Power [VA]	5500	6600	8800	11000***	12000*
Rated Output Current [A]@230Vac	7.2	8.7	11.6	14.5	17.4**
Max. Output Current [A]	8.0	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]	30/15.8	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]	5000	6000	8000	10000	12000
Peak Output Apparent Power [VA]	7500,60s	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			
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°C to +50°C				
Ambient Humidity	5-95% non-condensing				

* For Ireland HS3-12K-T2-W/4G-P Rated AC Power [W] and Max.Apparent Power [VA] is 11000

** For Ireland HS3-12K-T2-W/4G-P Rated Output Current [A] @230Vac and Max. Output Current [A] is 15.9

*** For Belgium HS3-10K-T2-W/4G-P Max. Apparent Power [VA] is 10000, HS3-10K-T2-W/4G-P Max. Output Current [A] is 14.5