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Products are continuously updated and parameters are just for references.

www.saj-electric.com



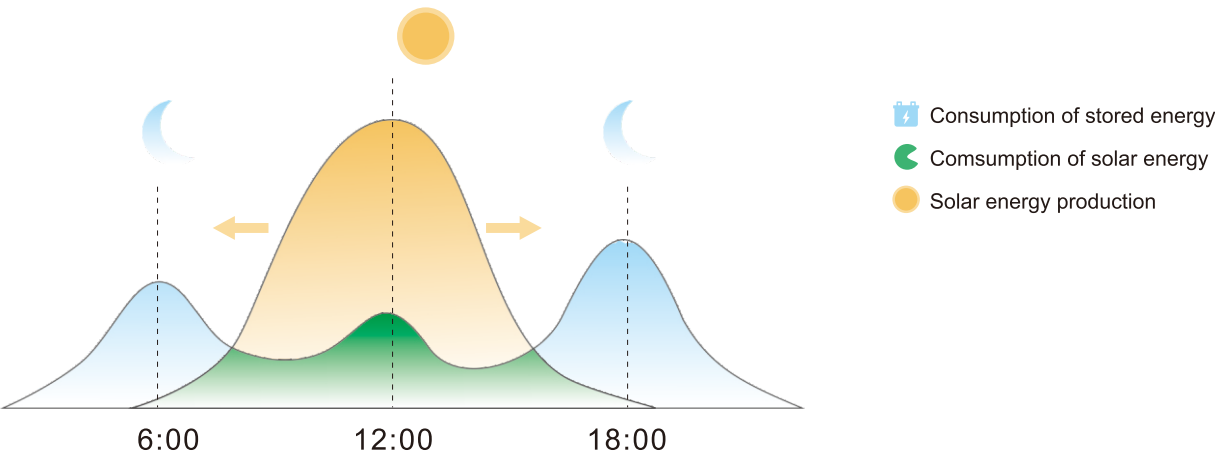
24H POWERING YOUR HOME

SAJ energy storage systems provide customers with smart energy solutions, which considerably enhance power independence and provide more flexibility in residential energy management.

With UPS function, SAJ solar storage products guarantee an uninterrupted power supply at your home even when grid fails.

SAVING BILLS VIA PEAK LOAD SHIFTING

Based on different rates of grid power, customers can set up the charging and discharging time of battery to reduce electricity bills. Battery can be charged from the grid at low grid price rates and be discharged to supply loads when the power price is expensive.



GUARANTEE YOUR POWER SUPPLY WITH BACKUP POWER



Under backup mode, the electricity stored in battery can be saved for powering essential appliances when the grid fails. When power outage occurs, the backup mode can be switched ON automatically within 10 milliseconds.

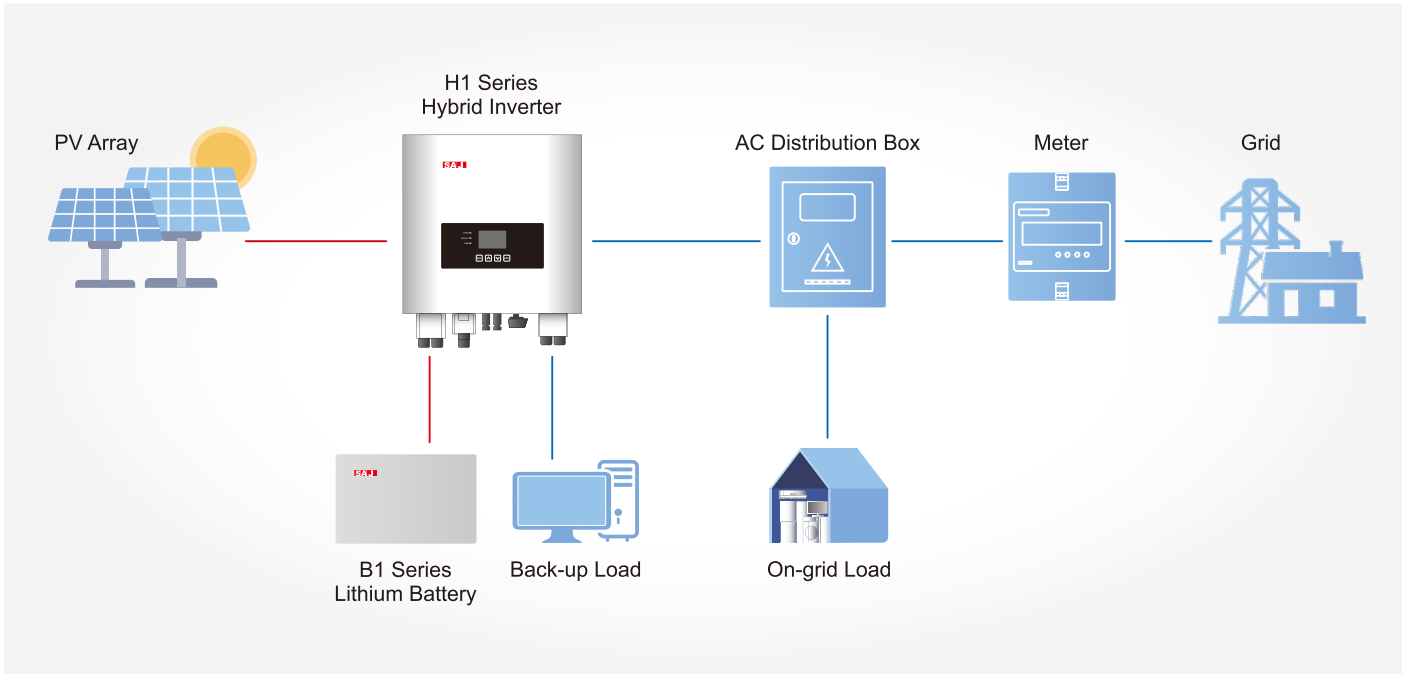
SMART HOME & ENERGY MANAGEMENT

eSolar Portal (eSolar Web & eSolar APP) is a cloud based platform developed and maintained by SAJ team, the platform furnishes with data monitoring, remote maintenance and energy management. eSolar Portal brings all the energy into visualization for an easy maintenance anytime, anywhere.



H1 Hybrid Solar System Diagram

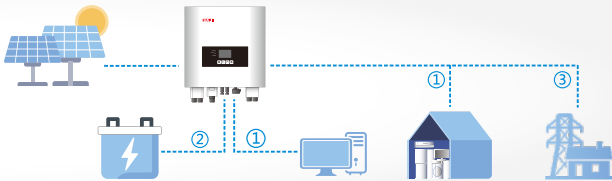
H1 inverter can significantly improve the self-consumption rate of solar energy and lower the dependency on the grid. The energy generated by PV system will be fed to loads first, and then the surplus energy can charge the battery for later use, if there is still more excess energy, it will be exported to the grid.



H1 Working Modes

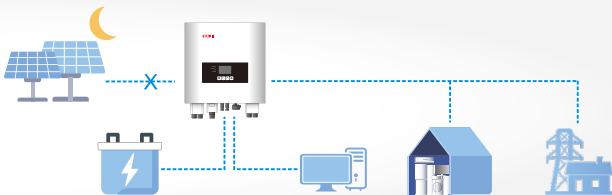
Self-consumption mode

Throughout the day, the power generated by the PV system will supply household loads first, and then saving surplus energy to battery that can be used anytime. The excess electricity can be exported to the grid.



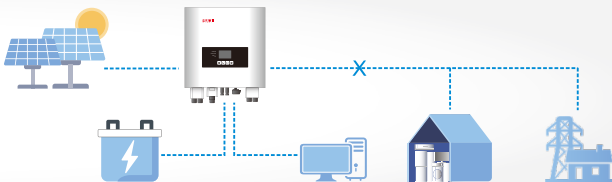
Time-of-use mode

Battery charging and discharging time can be flexibly set based on your local peak and off-peak electricity period to minimize the electricity bills.



Backup mode

Backup mode is able to maintain the battery in a charged state. When a power outage happens, the battery discharges to power the backup loads.



H1 SINGLE PHASE SERIES

H1-3K/3.6K/4K/4.6K/5K/6K-S2; H1-4.6K/5K/6K-LS2



With UPS function switch time < 10ms



Zero export function supported



24H energy monitoring and management



Easy settings of smart working modes



Max. 100A charge current



Fanless design quiet and comfortable

H1-3K/3.6K/4K/4.6K/5K/6K-S2 Datasheet

Model	H1-3K-S2	H1-3.6K-S2	H1-4K-S2	H1-4.6K-S2	H1-5K-S2	H1-6K-S2
Input DC						
Max. PV Array Power [Wp] @STC	4500	5400	6000	6900	7500	9000
Max. DC Voltage [V]	600					
MPPT Voltage Range [V]	90-550					
Nominal DC Voltage [V]	360					
Start Voltage [V]	120					
Min. DC Voltage [V]	80					
Max. DC Input Current [A]	12.5/12.5					
Max. DC Short Circuit Current [A]	15/15					
Number of MPPT	2					
DC Switch	Integrated					
Battery Parameters						
Battery Type	Lithium battery					
Rated Input Voltage/Voltage Range [V]	48/42~58.5					
Max/Rated Charging Current [A]	60/60			100/100		
Charging Mode Control	3-stages					
Grid Parameters						
Rated Output Power [W]	3000	3680	4000	4600	5000 ^{*1}	6000
Max.Output Power [VA]	3000	3680	4000	4600	5000	6000
Rated Output Current [A]	13.1	16.0	17.4	20.0	21.8 ^{*2}	26.1
Max. Output Current [A]	13.6	16.7	18.2	20.9	22.7	27.3
Rated Grid Voltage/Range [V]	220,230,240/180~280					
Rated Grid Frequency/Range [Hz]	50,60/±5					
Power Factor [cos ϕ]	0.8 leading~0.8 lagging					
Total Harmonic Distortion [THDi]	< 3%					
Feed-in	L+N+PE					
AC Output [Back-up Mode]						
Max. Output Power [VA]	3000			4600	5000	
Peak Output Apparent Power [VA]	3600, 10sec			5500, 10sec	6000, 10sec	
Output Voltage [V]	220/230/240					
Output Frequency [Hz]	50/60					
Total Harmonic Distortion of Voltage	<3%					
Efficiency						
Max. Efficiency	97.6%					
Euro Efficiency	97.0%					
Max. Battery to Load Efficiency	94.6%					
Protection						
AC Short-circuit Protection	Integrated					
Overload Protection	Integrated					
DC Overvoltage/Undervoltage Protection	Integrated					
AC Overvoltage/Undervoltage Protection	Integrated					
AC Overfrequency/Underfrequency	Integrated					
Peak-to-trough Period Setting	Integrated					
Interface						
PV Input	MC4					
Battery	Terminal block					
Display	LCD					
Communication	Wi-Fi/ GPRS/ Ethernet (Optional)					
General Data						
Operating Temperature Range	-25°C to +60°C					
Cooling Method	Natural convection					
Ambient Humidity	0-100% non-condensing					
Altitude	4000m (> 3000m power derating)					
Noise [dBA]	< 29					
Ingress Protection	IP65					
Dimensions [H*W*D] [mm]	470*470*190					
Weight [kg]	23					
Standard Warranty [Year]	5					
Applicable Standard	IEC62109-1/2, IEC61000-6-1/2/3/4, EN50438, EN50549, C10/C11, IEC62116, IEC61727, RD1699, UNE 206006, UNE 206007, CEI 0-21, AS4777.2, CQC NB/T 32004, VDE-AR-N 4105					

Remarks: ^{*1} For AS/NZS 4777.2 Rated Output Power is 4999VA. ^{*2} For AS/NZS 4777.2 Rated Output Current is 21.7A.

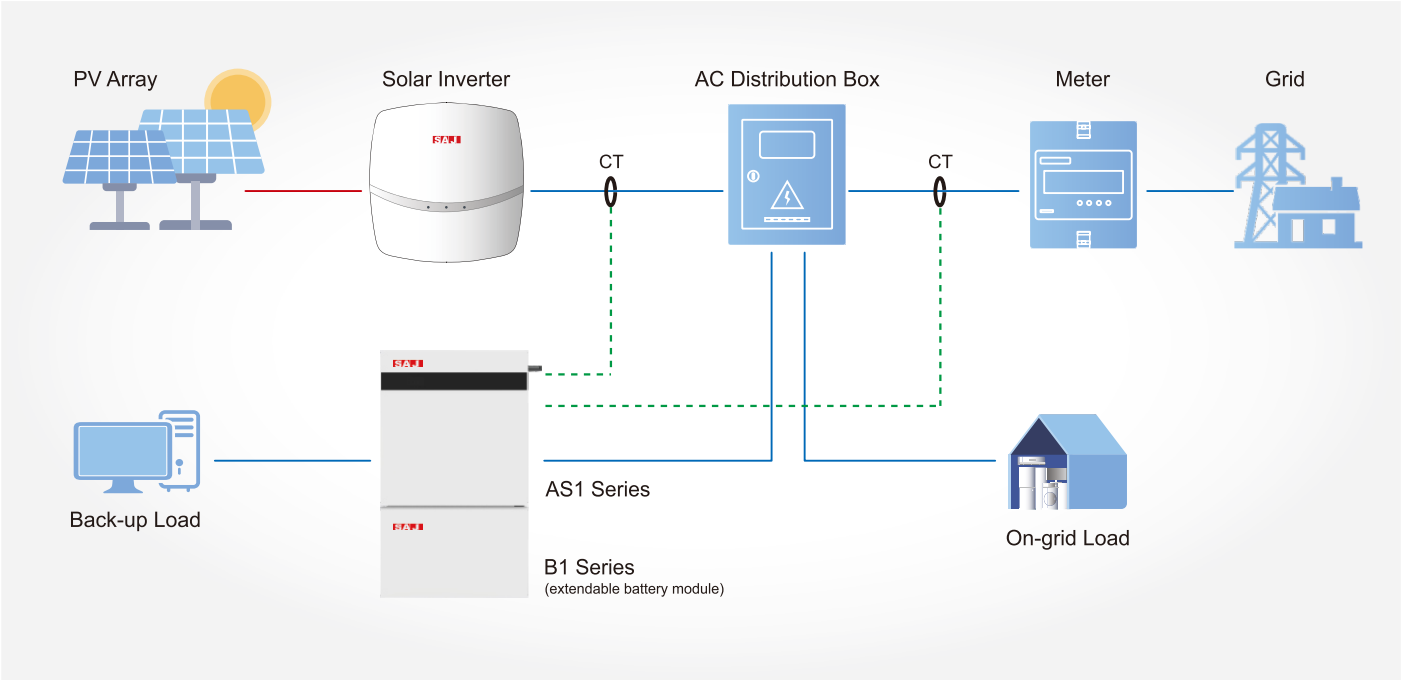
H1-4.6K/5K/6K-LS2 Datasheet

Model	H1-4.6K-LS2	H1-5K-LS2	H1-6K-LS2
Input DC			
Max. PV Array Power [Wp] @STC	6900	7500	9000
Max. DC Voltage [V]	600		
MPPT Voltage Range [V]	90-550		
Nominal DC Voltage [V]	360		
Start Voltage [V]	120		
Min. DC Voltage [V]	80		
Max. DC Input Current [A]	12.5/12.5		
Max. DC Short Circuit Current [A]	15/15		
Number of MPPT	2		
DC Switch	Integrated		
Battery Parameters			
Battery Type	Lithium battery		
Rated Input Voltage/Voltage Range [V]	48/42~58.5		
Max/Rated Charging Current [A]	60/60		
Charging Mode Control	3-stages		
Grid Parameters			
Rated Output Power [W]	4600	5000 ^{*1}	6000
Max.Output Power [VA]	4600	5000	6000
Rated Output Current [A]	20.0	21.8 ^{*2}	26.1
Max. Output Current [A]	20.9	22.7	27.3
Rated Grid Voltage/Range [V]	220, 230, 240/180~280		
Rated Grid Frequency/Range [Hz]	50, 60/±5		
Power Factor [cos ϕ]	0.8 leading~0.8 lagging		
Total Harmonic Distortion [THDi]	<3%		
Feed-in	L+N+PE		
AC Output [Back-up Mode]			
Max. Output Power [VA]	3000		
Peak Output Apparent Power [VA]	3600, 10sec		
Output Voltage [V]	220/230/240		
Output Frequency [Hz]	50/60		
Total Harmonic Distortion of Voltage	< 3%		
Efficiency			
Max. Efficiency	97.6%		
Euro Efficiency	97.0%		
Max. Battery to Load Efficiency	94.6%		
Protection			
AC Short-circuit Protection	Integrated		
Overload Protection	Integrated		
DC Overvoltage/Undervoltage Protection	Integrated		
AC Overvoltage/Undervoltage Protection	Integrated		
AC Overfrequency/Underfrequency	Integrated		
Peak-to-trough Period Setting	Integrated		
Interface			
PV Input	MC4		
Battery	Terminal block		
Display	LCD		
Communication	Wi-Fi/ GPRS/ Ethernet (Optional)		
General Data			
Operating Temperature Range	-25°C to +60°C		
Cooling Method	Natural convection		
Ambient Humidity	0-100% non-condensing		
Altitude	4000m (>3000m power derating)		
Noise [dBA]	< 29		
Ingress Protection	IP65		
Dimensions [H*W*D] [mm]	470*470*190		
Weight [kg]	23		
Standard Warranty [Year]	5		
Applicable Standard	IEC62109-1/2, IEC61000-6-1/2/3/4, EN50438, EN50549, C10/C11, IEC62116, IEC61727, RD1699, UNE 206006, UNE 206007, CEI 0-21, AS4777.2, CQC NB/T 32004, VDE-AR-N 4105		

Remarks: ^{*1} For AS/NZS 4777.2 Rated Output Power is 4999VA. ^{*2} For AS/NZS 4777.2 Rated Output Current is 21.7A.

AS1 AC Retrofit Battery System

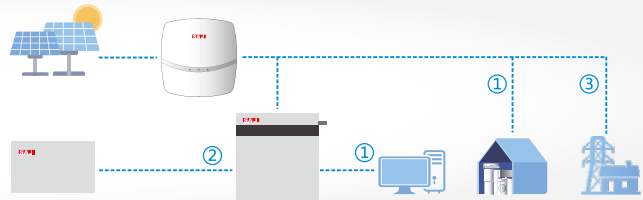
As1 series is designed to convert and upgrade the existing grid-tied PV system into a storage one. Throughout the day, the power generated by PV system will supply to household loads first, and then saving surplus energy to battery that can be used at any time, the excess electricity can be exported to the grid. Battery charging and discharging time can be flexibly set based on your local peak and off-peak electricity period to minimize the utility bills.



AS1 Working Modes

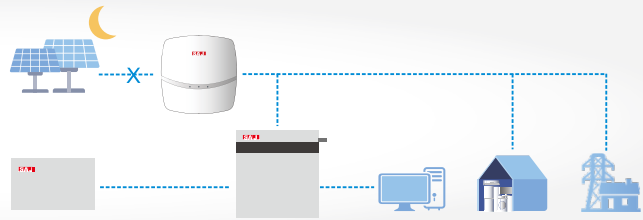
Self-consumption mode

Power supply priority: ① Load ② Battery ③ Export to Grid



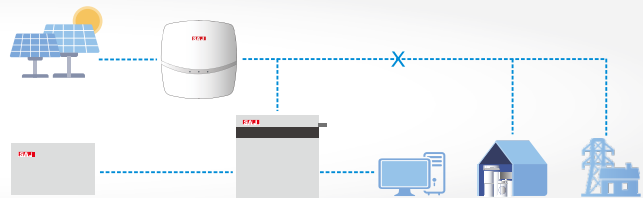
Time-of-use mode

On the basis of self-consumption mode, time-of-use mode needs extra settings of charge and discharge hours to the battery.



Backup mode

Under backup mode, the inverter will deploy the system to release power to support backup load according to the reserved SOC limit if the grid is blackout.



AS1 SERIES

AS1-3KS-5.1



Flexibility in retrofitting the existing system



Built-in 5.1kWh lithium battery (extendable)



Compatible with all inverter brands



Easy settings of smart working modes



With UPS function
Switch time < 10ms



Fanless design
quiet and comfortable

AS1-3KS-5.1 Datasheet

Model	AS1-3KS-5.1
Battery Parameters	
Battery Type	Lithium-iron phosphate (LiFePO4)
Total Energy Capacity [Wh]	5120
Battery Capacity [Ah]	100
Rated Voltage [V]	51.2
Voltage range [V]	42~58.4
Depth Of Discharge [DOD]	≤ 90%
Cycle Life	≥ 6000
Max.Charge Current [A]	60
Max.Discharge Current [A]	60
Scalability	Yes (up to 20.4kWh)
Grid Parameters	
Max.Continuable Output Power [VA]	3000
Max.Output Current [A]@230Vac	13.1
Rated Grid, Backup Voltage/Range [V]	220, 230, 240/180~280
Rated Grid/Backup Frequency/Range [Hz]	50, 60/±5
Power factor [cos φ]	0.8 leading~0.8 lagging
Feed-in	L+N+PE
AC Output [Back-up Mode]	
Max. Continuable Output Power [VA]	3000
Output Voltage [V]	220/230/240
Max.Output Current [A]@230Vac	13.1
Output Frequency [Hz]	50/60
Peak Output Power [VA]	3600, 10sec
General Data	
Communication	Wi-Fi/ 4G/ Ethernet (Optional)
Operating Temperature Range	0°C~50°C
Cooling Method	Natural Convection
Ambient Humidity	0-95% Non-condensing
Noise [dBA]	< 29
Ingress Protection	IP65
Dimensions [H*W*D][mm]	738*650*186
Weight [kg]	64
Standard Warranty [Year]	5 (Standard)/ 10 (Optional)
Applicable Standard	AS 4777.2, VDE 4105, G98, C10/C11, CEI0-21, IEC62619, IEC62040, UN38.3

B1

Lithium Battery

B1-5.1-48





Modular Design



Excellent Protection



Easy Installation



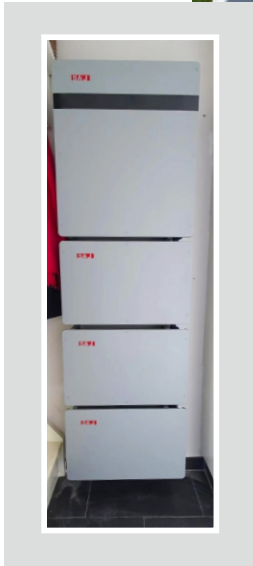

Safest Chemistry



Long Lifespan

Model	B1-5.1-48
Electrical Parameters	
Total Energy Capacity [Wh]	5120
Usable Capacity [Wh]	4600
Rated Voltage [V]	51.2
Voltage range [V]	42~58.4
Depth Of Discharge [DOD]	≤ 90%
Cycle Life	≥ 6000
Max.Charge Current [A]	60
Max.Discharge Current [A]	60
Physical Parameters	
Battery Type	Lithium-iron phosphate (LiFePO4)
Communication	CAN
Operating Temperature Range	0°C~50°C
Cooling Method	Natural convection
Ambient Humidity	0-95% non-condensing
Ingress Protection	IP65
Dimensions [H*W*D][mm]	410*650*186
Weight [kg]	48
Standard Warranty [Year]	5 (Standard) / 10 (Optional)
Applicable Standard	UN38.3, IEC 62619

Residential Storage Solutions



PLANT CAPACITY

9.9kWp



LOCATION: BELGIUM



PLANT CAPACITY

10kWp

LOCATION: BELGIUM



PLANT CAPACITY

20kWp

LOCATION: CHINA



PLANT CAPACITY

8kWp

LOCATION: BELGIUM