

### **AC Retrofit Battery System Working Modes**

# 1 Self-consumption mode

Under self-consumption mode, the inverter is capable of powering loads first and saving surplus energy from photovoltaic system to battery and can be called on at any time. the excess energy can be exported to grid.

## 2 Time-of-use mode

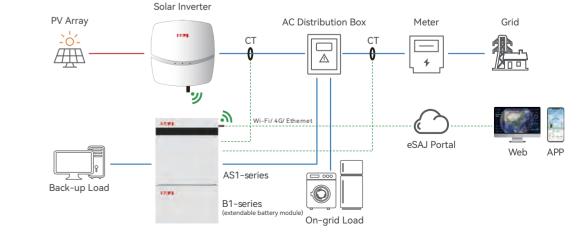
Battery charging and discharging time can be flexibly set based on your need. It is widely used when there is a peak and valley tariffs to minimize the electricity bills.

## 3 Backup

Under backup mode, the system to release load according to the grid is blackout.

#### mode

the inverter will deploy power to support backup reserved SOC limit if the



AS1 series is an AC retrofit storage system consisting of a 3kW AC inverter and a 5.12kWh battery. It provides users with great flexibility to upgrade systems to energy storage systems. It helps users to increase energy independence and effectively helps them to save on electricity bills through

existing grid-connected PV smart working modes.



attery Parameters		
Battery Type	LiFePO4	
Total Energy Capacity [kWh]	5.12	
Battery Capacity [Ah]	100	
Rated Voltage [V]	51.2	
Voltage Range [V]	42~58.4	
Depth Of Discharge [DOD]	90% (off-grid)	
Cycle Life	≥ 6000	
Max. Charge Current [A]	60	
Max. Discharge Current [A]	60	
Scalability	Ja ((up to 20.4kWh)	
Grid Parameters		
Max. Continuable Output Power [VA]	3000	
Max. Output Current [A]@230Vac	13.1	
Rated Grid Voltage/Range [V]	L+N+PE, 220, 230, 240/180 ~ 280	
Rated Output Frequency [Hz]	50,60/45 ~ 55,55 ~ 65	
Power Factor [cos φ]	0.8 leading ~ 0.8 lagging	
AC Output [Back-up Mode]		
Max. Continuable Output Power [VA]	3000	
Output Voltage [V]	220/230/240	
Max. Output Current [A]@230Vac	13.1	
Rated Output Frequency [Hz]	50/ 60 ±5	
Peak Output Apparent Power [VA]	3600, 10s	
General Parameters		
Communication	Wi-Fi/Ethernet/4G (optional)	
Operating Temperature Range	0°C~50°C	
Cooling Method	Natural convection	
Ambient Humidity	0 ~ 95% Non-condensing	
Noise [dBA]	< 29	
ngress Protection	IP65	
Dimensions [H*W*D][mm]	738*650*186	
Weight [kg]	64	
Warranty [Year]	5/10/15/20	
Applicable Standard	AS 4777.2, VDE 4105, G98, C10/C11, CEI 0-21, IEC 62619, IEC 62040, UN38.3	

AS1-3KS-5.1

Flexibility in retrofitting the existing system	Compatible with all inverter brands	UPS With UPS function switch time ≤ 10ms
Built-in 5.1kWh lithium battery (extendable)	Fanless design quiet and comfortable	Easy setting of smart working modes

21/22