

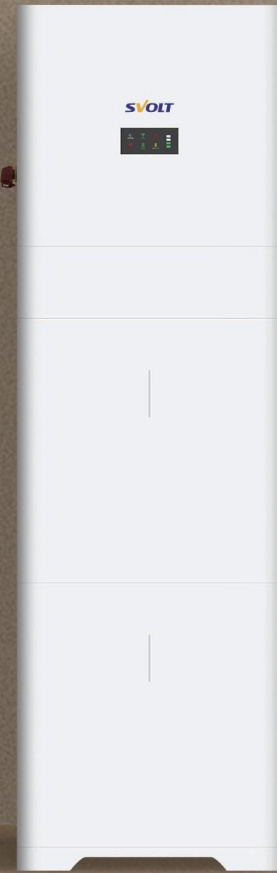
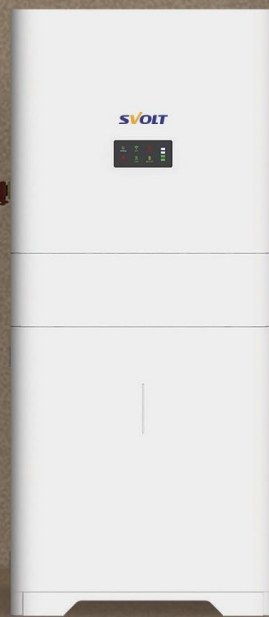


**OES**  
Optimal Energy Solutions

# Single-Phase Residential

Energy Storage System

Hybrid Inverter 5 kW  
LFP Battery 5.1-30.6 kWh



Up to 150%  
PV input



Easy installation  
Plug and Play



Factory reset  
function



Off-grid 1.2 times  
overload operation



Load monitoring  
accuracy 10W.



Automatic parallel  
function, no dip



IP65  
Rating



Remote  
upgrade



Anti-back flow  
function

# Product Parameters

## AE5K-L1-S



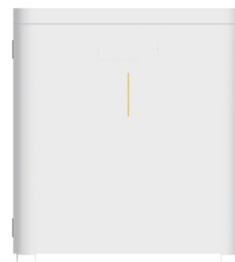
### HYBRID INVERTER

IP rating	IP65
Cooling	Natural cooling
Warranty	5 years
Coupling	Hybrid
Max. PV Input Power (kW)	7
Max. DC Voltage (V)	550
MPPT Voltage Range (V)	150-500
Max. DC Current (A)	14 +14
Isc PV (A)	18 +18
Max. Charge/Discharge Power (kW)	5 / 5
Rated Battery Voltage (V)	51.2
Battery Voltage Range (V)	45-58
Max. Battery Charge/Discharge Current (A)	100 / 100
Rated Grid Voltage (V)	L / N / PE 220 / 230
Rated Current (A)	22.7 / 21.7
Rated Grid Frequency (Hz)	50/60
Rated Grid Input Active Power (kW)	5
Max. Grid Input Current (A)	25
Rated Grid Output Active Power (kW)	5
Rated EPS Output Apparent Power (kVA)	5
Max. EPS Output Current (A)	25
Max. Efficiency	97.6%
Power Factor Range	0.9ind-0.9cap
THD	<3%
Operating Temperature Range	-25-60°C (>45°C Derating)
Communication Interface	WiFi\RS485
Product Dimension (W×H×D) / Weight	550×565×232 mm /28kg
Certification Standards	Safety: IEC62109-1, IEC62109-2, EMC: IEC61000-6-1, IEC61000-6-3
Certificate	TUV CE
Grid-Connection Standards	CEI 0-21:2022; VDE-AR-N 4105; G98/G99; PEA: 2016/MEA: 2015



# Battery Pack

**2101000XEA51B-5.1K-A**



Rated Voltage (V)	51.2
Operating Voltage Range (V)	48 - 56
Rated Capacity (Ah)	100
Energy Capacity (kWh)	5.12
Battery Material	LFP
Recommned Charge/Discharge Current	50A / 50A (25°C)
Max. Charge/Discharge Current	100A / 100A (25°C)
Charge/Discharge Efficiency	> 95%
Cycle Life	> 6000* Cycles
Ambient Temperature	-28°C ~ 55°C
Charging / Discharging Temperature	0°C~52°C
Communication	CAN, RS485
Battery Dimension (W×H×D) / Weight	550 x 500 x 195 mm / 48 kg
Certificate	Intertek ; CE
EMC Certification Standards	IEC 61000 - 6 - 1, IEC 61000 - 6 - 3
Safety Certification Standards	IEC 62619, IEC 63056, IEC 60730 Annex H
Transportation	UN38.3

