



ePowerCUBE **AIOS**

Single-phase residential energy storage system



150% PV panel power configuration



Easy installation



IP65 dustproof and waterproof C4 anti-corrosion



Off-grid 150% overload operation



Low-temperature heating



90% DoD



Load monitoring accuracy 10W



Automatic parallel connection, without voltage limitations



Reverse flow protection

Single-phase inverter

Model	AE4K6-L1-S	AE5K-L1-S	AE6K-L1-S
PV (input)			
Max. PV input power (kW)		7	
Max. DC voltage (V)		550	
MPPT voltage range (V)		180-500	
Max. DC current (A)		14+14	
Max. inverter backfeed current to the array (A)		0	
Isc PV (A)		18+18	
Start voltage		125	
AC (input/output/EPs)			
Rated grid voltage (V)		L/N/PE 220/230	
Rated current (A)	20.9/20.0	22.7/21.7	27.3/26.1
Rated grid frequency (Hz)	50/60	50/60	50/60
Rated input active power (kW)	4.6	5	6
Rated input apparent power (kVA)	4.6	5	6
Max. input apparent power (kVA)	4.6	5	6
Max. input current (A)	25	25	28
Overload capacity	130%	120%	100%
Max. output current (A)	25	25	28
System efficiency			
MPPT efficiency		99.90%	
European efficiency		97%	
Max. efficiency		97.60%	
Charge/discharge efficiency		97.6%/96%	
General information			
Operating temperature range		-25-60°C(>45°Cderating)	
Topology		Non-Isolated	
Altitude		<2000m	
Noise		<30dB	
Protection rating		IP65	
Cooling method		Natural cooling	
Product size (mm)		550*565*232	
Weight (kg)		28	
EMC certification standards		IEC61000-6-1, IEC61000-6-3	
Safety certification standards		IEC62109-1, IEC62109-2	
Certificate		TUV CE	
Grid-Connection Standards		G98/G99, CEI 0-21: 2022, VDE-AR-N 4105	
(refer to the certification status below)		CEI 0-21: 2022-03、V1:2022-11、V2:2024-01 CEI 0-21: 2022-03、V1:2022-11、V2:2024-01	

Low-voltage battery

Model	AES5.1-L(with auxiliary electric heating)	AES5.1-L1
Battery parameters		
Rated voltage		51.2
Operating voltage		48-56
Rated capacity (Ah)		100
Energy capacity (kWh)		5.12
Battery material		LFP (16S1P)
Recommended charge/discharge current		50A/50A (25°C)
Max. charge/discharge current		100A/100A (25°C)
Charge/discharge efficiency		> 95%
Cycle life		> 10000* Cycles
Depth of discharge (DoD)		90%
Operating temperature		-20°C~55°C
Communication interface		CAN, RS485
General information		
Dimensions of battery pack (WxHxD)		550×485×195 mm
Battery pack weight (kg)		48
Protection rating		IP65
Cooling method		Natural Cooling
Warranty period		10 Years
Certification		CE
EMC certification standards		IEC 61000-6-1, EC 61000-6-3
Safety certification standards		IEC 62619, IEC 63056, IEC 60730 Annex H
Environmental standards		—
Transportation standards		UN38.3
Scalability		Up to 15 modules

* The above data were obtained through tests under laboratory conditions at 20°C, and the actual operating environment may vary.