



ePowerCUBE AIOT

Three-phase residential energy storage system



150% PV panel power
configuration



Easy installation



Three-phase
unbalanced output



Load monitoring
accuracy 10W



Intelligent insulation
detection



120-800V battery
voltage range



Off-grid 150% overload
operation



Multi-stage charging/
discharging time setting



IP65 dust and water protection
C4 corrosion protection



Reverse flow protection



Remote upgrade



Inverter, 5-year warranty
Battery pack, 10-year warranty

Three-phase hybrid inverter

Model	AE8K-H-T	AE10K-H-T	AE12K-H-T
PV (input)			
Max. PV input power (kW)		15	
Max. DC voltage (V)		1000	
MPPT voltage range (V)		180~950	
Max. DC current (A)		16+16	
Max. inverter backfeed current to the array (A)		0	
Isc PV (A)		20+20	
Start voltage		120	
AC (input/output/EPs)			
Rated grid voltage (V)		3L/ N/ PE, 220/ 380, 230/ 400	
Rated current (A)	12.2/11.6	15.2/14.5	18.2/17.4
Rated grid frequency (Hz)	50/60	50/60	50/60
Rated input active power (kW)	12	15	18
Rated input apparent power (kVA)	12	15	18
Max. input apparent power (kVA)	12	15	18
Max. input current (A)	20.3	22.7	27.2
Overload capacity	150%	120%	100%
Max. output current (A)	13.5	16.8	20.1
System efficiency			
MPPT efficiency		99.90%	
European efficiency		97%	
Max. efficiency		97.60%	
Charge/discharge efficiency		98.5%/97.5%	
General information			
Operating temperature range		-25~60°C(>45°C derating)	
Topology		Non-Isolated	
Altitude		<3000m	
Noise		<30dB	
Protection rating		IP65	
Cooling method		Natural cooling	
Product size (mm)		550*575*244	
Weight (kg)		29	
Safety certification standards		IEC62109-1, IEC62109-2	
EMC certification standards		IEC61000-6-1, IEC61000-6-3	
Certificatet		TUV CE	
Grid-Connection Standards (refer to the certification status below)		Germany: VDE-AR-N 4105/11.18 Europe: EN 50549-1:2019 EN 50549-10:2022 South Africa: NRS 097-2-1:2017 Ed.2.1 Sweden: EIFS 2018:2 CEI 0-21: 2022-03、V1:2022-11、V2:2024-01 CEI 0-21: 2022-03、V1:2022-11、V2:2024-01	

High-voltage battery

Model	AES5.1-M (with auxiliary electric heating)	AES5.1-M1
Battery parameters		
Rated voltage		102.4
Operating voltage		89.6~113.6
Rated capacity (Ah)		50
Energy capacity (kWh)		5.12
Battery material		LFP (32S1P)
Recommended charge/discharge current		25A/25A (25°C)
Max. charge/discharge current		32A/32A(25°C)
Charge/discharge efficiency		> 95%
Cycle life		> 10000* Cycles
Depth of discharge (DoD)		90%
Operating temperature		-18°C~53°C
Communication interface		CAN, RS485
General information		
Dimensions of battery pack (WxHxD)		550×340×252 mm
Battery pack weight (kg)		52
Dimensions of battery controller (Wx HxD)		550×200×252 mm
Weight of battery controller (kg)		9.5
Protection rating		IIP65
Cooling method		Natural Cooling
Warranty period		10 Years
EMC certification standards		IEC 61000-6-1, IEC 61000-6-3
Safety certification standards		IEC/EN62477-1, IEC62619, IEC 60730 Annex H, IEC63056
Environmental standards		—
Transportation standards		UN38.3
Scalability		Up to 6 modules

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