

ePowerCUBE **PCSS**

Single-phase residential hybrid inverter



150% PV panel power
configuration



Reverse flow
protection



Load monitoring
accuracy 10W



Off-grid 150% overload
operation



Remote upgrade



10-year warranty

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 (V)		14+14				
Max. inverter backfeed current to the array (A)		0				
Isc PV (A)		18+18				
Start voltage		125				
AC (input/output)						
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 (WA)		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		
Battery input/output						
Max. charge/discharge power (kW)		4.6/4.6	5/5	5/5		
Min. battery voltage under full load (V)		51.2	51.2	51.2		
Battery voltage range		45-58	45-58	45-58		
Max. charge/discharge current (A)		70/90	70/100	70/100		
Battery type		LFP	LFP	LFP		
System efficiency						
MPPT efficiency		99.90%				
European efficiency		97%				
Max. efficiency		97.60%				
Charge/discharge efficiency		97.6%/96%				
Protection function						
DC reverse-polarity protection		Yes				
Island protection		Yes				
Residual current protection		Yes				
AC short-circuit protection		Yes				
AC overvoltage protection		Yes				
Integrated DC switch		Yes				
Insulation monitoring		Yes				
General information						
Operating temperature range		-25-60℃(>45℃derating)				
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 standard		G98/G99 CEI 0-21: 2022 VDE-AR-N 4105				
(refer to the certification status in the table below)		CEI 0-21: 2022-03、V1:2022-11、V2:2024-01 CEI 0-21: 2022-03、V1:2022-11、V2:2024-01				

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