

C&I ENERGY STORAGE SYSTEM

E-MATE 50-61-A

Air Cooling 50kW/61kWh

UN38.3



Features



PV / Battery / AC / DG All in One Hybrid System



Used in Both On-Grid and Off-Grid Application



Supports 6 in Parallel Both AC and DC Side



IP55-Certified, Suitable for More Outdoor Applications



4*MPPT / 2* Bat and 2* Coms



10ms UPS Switching Backup Power



Multi-Level Protection and Alarm (Gas, Water, Ventilation)



Intelligent EMS, Remote Monitoring and Fault Diagnose



Scenarios



Industrial Parks



Commercial Parks



Livestock Farms



Farms



Manufacturing Bases

DATASHEET

Model		E-MATE 50-61-A
Battery Parameters		
Cell technology	LFP-3.2 V / 100 Ah	
Battery pack	5.12 kWh, 51.2 V	
Number of packs	12	
Rated capacity	61.44 kWh	
Rated voltage	614.4 V	
Rated current	80 A	
Voltage range	537.6~691.2V	
Charge / discharge rate	0.8P	
AC Side Parameters		
Rated output power	50 kW	
Rated grid voltage	3L / N / PE220 / 380, 230 / 400Vac	
Rated output current	76 A	
Allowable grid voltage range	230 V ~ 400 V	
Rated grid frequency	50Hz / 60Hz	
Output THDi	< 3%	
Power factor	-1 ~ 1	
Overload capacity	110% (long term), 120% (1 min)	
On / Off-grid switching time	< 20ms	
Charge / discharge switching time	< 100ms	
Maximum efficiency	97.80%	
PV Side Parameters		
PV side voltage range	150 V-850 V (full power above 500 V)	
DC maximum current	4*30 A	
DC maximum power	75 kW	
MPPT quantity	4	
Other Parameters		
Dimension (W×D×H)	740×1040×2330 mm	
	29.1x40.9x91.7 inch	
Weight	1220 kg (2689.6 lbs)	
Operating temperature	-20°C~-+50°C (-22°F~-+131°F) (Derating Below-15°C or above 45°C)	
Relative humidity	0~95% (No condensation)	
Maximum working altitude	≤4000 m (> 2000 m Derating)	
Noise	≤75dB	
IP Rating	IP55	
Cooling method	Forced air cooling	
FSS	Aerosol: module-level + stack-level, water firefighting, combustible gas detection and exhaust	
Communication	CAN / RS485 / TCP	
Cycle life	6000 cycles (25±2°C, 0.5P / 0.5P, 70% SOH)	
Battery Cabinet — Hybrid Inverter Cable Specs	3AWG	
Standard Compliance		
Compliance	UN38.3 / UN3480 / IEC62619 / IEC6100-6-2 / IEC62477-1 / COC (More available upon request)	

SYSTEM DIAGRAM

