

C&I Energy Storage System

Air Cooling ESS (On Grid Application)

E-MATE 100-221-A | 100kW/221kWh



Profit Maximization

Supports peak shaving, demand response, and grid expansion for max revenue.



Safety System

Integrates multi-level warnings (gas/water fire protection, exhaust) for asset safety. Efficient thermal management ensures long-term stability.



Intelligent O&M

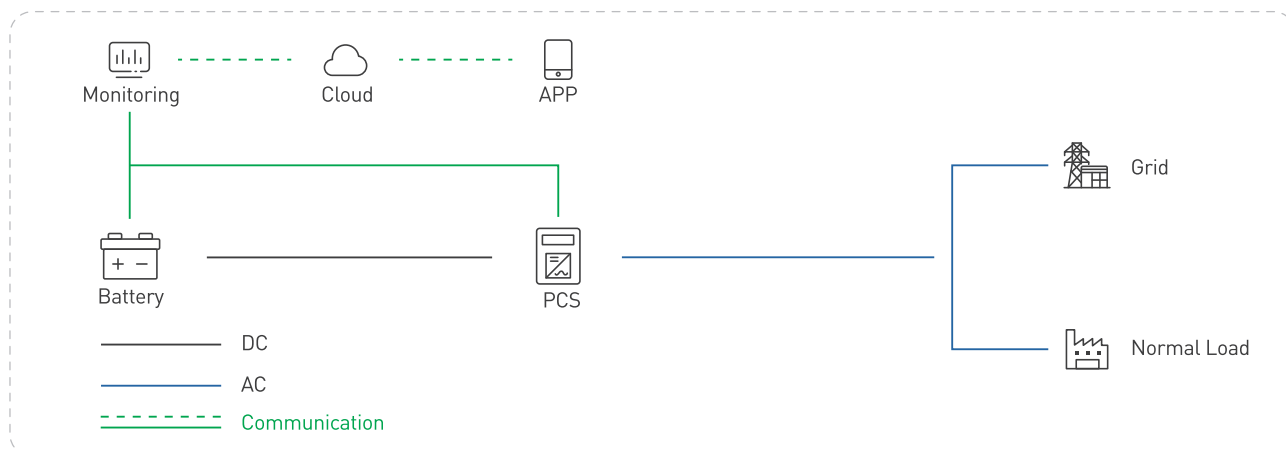
One-click management, remote monitoring, and seamless grid switching for hassle-free operation.



Integrated Design

Front-access, modular, and AC/DC integrated for easy deployment and maintenance.

System Diagram



Model	E-MATE 100-221-A
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Battery Side Parameters

Cell technology	LFP-3.2 V / 314 Ah
Battery module	20.096 kWh, 64 V
Number of packs	11
Battery system rated capacity	221.056 kWh
Battery system rated voltage	704 V
Battery system rated current	157 A
Battery system voltage range	616 V - 792 V
Battery system charge/discharge rate	0.5P

AC Side Parameters

Rated output power	100 kW
Rated grid voltage	400 V
Maximum output current	167 A
Allowable grid voltage range	340 V - 440 V
Rated grid frequency	50Hz / 60Hz
Output THDi	< 3%
Power factor	-1~1
AC output format	3W+PE
Overload capacity	110% (long-term), 120% (1min)
Charge/discharge switching time	<100ms
Maximum efficiency	98.5%

Other Parameters

Dimension (W×D×H)	1380×1540×2330 mm
	54×61×90 inch
Weight	2750 kg (6062.71 lbs)
Operating temperature	-30°C~+55°C (-22°F~+ 131°F) (Derating below -15°C or above 45°C)
Relative humidity	0 ~ 95% (No condensation)
Maximum working altitude	3000m (> 2000m Derating)
Noise	≤75dB
Ingress protection rating	IP55
Heat dissipation method	Forced air cooling
Firefighting	Aerosol: module-level (optional) + stack-level, water firefighting, combustible gas detection and exhaust
Communication	CAN / RS485 / TCP
Cycle life	8000 cycles (25±2°C, 0.5P / 0.5P, 70% SOH)

Standard Compliance

Compliance	UN38.3 / UN3480 / IEC62619 / IEC61000 / IEC62477-1 / CQC (More available upon request)
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