



C&I ENERGY STORAGE SYSTEM



Air Cooling ESS_E-MATE 105-221-A | 105kW/221kWh

-  Battery + PCS on grid storage system
-  Used in on grid storage / PV AC couple system
-  Supports 10 in parallel in AC side
-  20kWh modular design air cooling battery
-  Multi-Level protection and alarm (gas, water, ventilation)
-  Intelligent EMS, remote monitoring and fault diagnose

DATASHEET

Model	E-MATE 105-221-A	
Battery Parameters		
Cell technology	LFP-3.2 V / 314 Ah	
Battery pack	20.096 kWh, 64 V	
Number of packs	11	
Rated capacity	221.056 kWh	
Rated voltage	704 V	
Rated current	157 A	
Voltage range	616 V ~ 792 V	
Charge / discharge rate	0.5P	
AC Side Parameters (optional)		
Rated output power	105 kW	
Rated grid voltage	400 V	
Rated 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+N	
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	
IP Rating	IP55	
Cooling method	Forced air cooling	
FSS	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 / IEC6100-6-2 / IEC62477-1 / CQC (More available upon request)	

SYSTEM DIAGRAM

