C&I ENERGY STORAGE SYSTEM

E-MATE 50-61-A

Air Cooling | 50 kW / 61 kWh

UN38.3 IEC



Features

- PV / Battery / AC / DG All in One Hybrid System
- 4 × MPPT / 2 × Bat and 2 × Coms
- Used in Both On-Grid and Off-Grid Applications
- 20 ms UPS Switching Backup Power
- Supports 6 Units in Parallel on Both the AC and DC Sides
- Multi-Level Protection and Alarm (Gas, Water, Ventilation)
- IP55-Certified, Suitable for More Outdoor Applications
- Intelligent EMS, Remote Monitoring and Fault Diagnosis

Scenarios


Industrial Parks


Commercial Parks


Livestock Farms


Farms


Manufacturing Bases

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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 ~ 691.2 V
Charge / discharge rate	0.8P
AC Side Parameters	
Rated output power	50 kW
Rated grid voltage	3L / N / PE, 220 / 380, 230 / 400 V AC
Rated output current	76 A
Allowable grid voltage range	230 V ~ 400 V
Rated grid frequency	50 Hz / 60 Hz
Output THDi	< 3 %
Power factor	-1 ~ 1
Overload capacity	110 % (long term), 120 % (1 min)
On / Off-grid switching time	< 20 ms
Charge / discharge switching time	< 100 ms
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 29.1 × 40.9 × 91.7 inch
Weight	1220 kg (2689.6 lb)
Operating temperature	−20 °C to +50 °C (-4 °F to +122 °F) (Derating below −15 °C or above 45 °C)
Relative humidity	0 % to 95 % (No condensation)
Maximum working altitude	≤ 4000 m (> 2000 m Derating)
Noise	≤ 75 dB
IP Rating	IP55
Cooling method	Forced-air cooling
FFS	Aerosol: stack-level, water firefighting, combustible gas detection and exhaust
Communication	CAN / RS485 / TCP
Cycle life	6,000 cycles (25 ± 2 °C, 0.5P / 0.5P, 70 % SOH)
Battery Cabinet — Hybrid Inverter Cable Specs	3 AWG
Standard Compliance	
Compliance	UN 38.3 / IEC 62619 / IEC61000-6-2 / IEC62109-1:2010 / IEC 62109-2:2011 (More available upon request)

SYSTEM DIAGRAM

