

EURONET C&I BATTERY ENERGY STORAGE SYSTEM

125 kW Rated Power | 241 kWh Rated Energy | IP54 All-in-One Cabinet

The Euronet Industrial and Commercial Energy Storage Battery System is a cabinet-style, all-in-one solution integrating a Power Conversion System (PCS), DC/DC converter, Static Transfer Switch (STS), lithium iron phosphate battery pack, temperature control, local monitoring and an integrated aerosol fire suppression system in a single IP54-rated enclosure. With 241 kWh of battery energy and PCS output up to 125 kW, it supports grid-connected, off-grid and hybrid switching modes with black-start capability, achieving $\geq 88\%$ overall efficiency.



6 KEY HIGHLIGHTS



All-in-One Cabinet

PCS, DC/DC, STS, battery, cooling & fire suppression in one IP54 enclosure.



125 kW PCS Output

137 kW max power, 110% overload and 98.20% conversion efficiency.



241 kWh LFP Battery

Fifteen 16.076 kWh packs in 1P240S at DC 768 V, air-cooled.



Fast Transfer Switching

STS switching period ≤ 10 ms across grid-tied, off-grid and hybrid modes.



Thermal & Fire Safety

3 kW air conditioning plus gas aerosol suppression with detectors.



Local EMS & Remote Access

Real-time monitoring, data logging, Modbus and cloud platform.

GENERAL

Model	E-CIESS125KW241KWH	Technical data sheet Rev. 1.0
System efficiency	≥88%	Overall
Working temperature	-20~55°C	
Working humidity	5~95% R.H.	
Altitude	<3000 m	
IP grade	IP54	
Corrosion grade	C4	
Size W×D×H	1800×1366×2319 mm	
Weight	3.3 T	
Fire suppression	Integrated aerosol	Smoke & temperature detectors
Communication	ETH	

BATTERY PARAMETERS

Cluster energy	241 kWh
Battery type / V·Ah	LFP 3.2/314
Module energy	16.076 kWh
Rated voltage	768 V
Voltage range	672~864 V
Configuration	1P240S
Charge / discharge	≤0.5P
Cooling mode	Air-cooled

BATTERY PACK

Nominal capacity	16.076 kWh
Nominal voltage	51.2 V
Compound mode	1P16S
BMU quantity	1
Size W×D×H	450×750×231 mm
Weight	115 kg
Cooling	Forced air
Terminals	Lock copper plate

CELL

Cell type	LFP
Nominal voltage / capacity	3.2 V / 314 Ah
Voltage range	2.8–3.6 V
Size T×W×H	71.7×174.6×207 mm
Weight	5.70±0.3 kg
Charge ratio	0.5P
Impedance	≤0.2 mΩ

PHOTOVOLTAIC

Max. PV power	50 × 4 kW
Max. PV voltage	600 V
MPPT range	200–600 V

EXCHANGE (AC)

Power	125 kW	
Transformer	125 kVA	Optional, AC 400/400
AC voltage	230 / 400 V	
Voltage range	-20% ~ 15%	
Frequency	50 / 60 Hz	
Power factor	0.99	
Off-grid	Auto / manual	

PCS

Power rating	125 kW
Max. power	137 kW
Rated voltage	400 V
Rated AC current	180 A
Max. DC current	200 A
Productiveness	98.20%
Overload	110%
Working temperature	-25~60°C

DC / DC CONVERTER

Power rating	60 kW
High side voltage	250–900 V
Low side voltage	200–600 V
Max. current (H / L)	110 A / 160 A
Productiveness	98.80%
Communication	CAN / RS485
Weight	35 kg
Size	566×600×150 mm

STS MODULE

Power rating	300 kW
Max. power	330 kW
Switching period	≤10 ms
Rated voltage	400 V
Protection	IP20
Productiveness	>99%
Weight	30 kg
Size	483×660×150 mm

HIGH-VOLTAGE COMPARTMENT

Rated voltage	DC 1000 V
Rated current	157 A
Max. current	170 A
SOC accuracy	<5%
Protection	IP20
Size W×D×H	390×680×178 mm
Weight	16 kg
Terminals	Plug-in

AIR-CONDITIONING

Rated voltage	AC 220 V $\pm 15\%$
Cooling capacity	3 kW
Max. current	12 A
Noise	70 dB
Protection	IPX5
Size W×D×H	500×250×1300 mm
Weight	62 kg
Refrigerant	R134A

EMS / MONITORING

Monitoring	Real-time monitoring & historical data logging	
Control	Automatic charge / discharge control & logic protection	
Remote access	Modbus & cloud platform	
Acquisition	RS485 / CAN / DIDO	Wireless / LAN forwarding
Working temperature	-25~60°C	

INSTALLATION ENVIRONMENT

Ambient conditions	-20°C ~ +55°C, RH <95%	No condensation
Air pressure	86–106 kPa	No conductive dust / corrosive gas

TRANSPORT & HANDLING

Shipping state of charge	40–50% SOC	Keep upright, avoid shock
Lifting	Crane / forklift capacity must exceed unit weight	

STORAGE

Storage conditions	0°C–45°C, RH $\leq 90\%$	Keep at 50–60% SOC
Maintenance charge	Recharge every 3 months	Ground resistance $\leq 4\Omega$

SCOPE OF SUPPLY — STANDARD SHIPMENTS LIST

1 Energy storage system	E-CIESS125KW241KWH	1 PCS
1.1 Battery cluster	241 kWh, DC 768 V, 314 Ah, 1P240S	1 PCS
1.1.1 Battery pack	16.076 kWh, DC 51.2 V, 314 Ah, 1P16S	15 PCS
1.1.2 High-voltage compartment	DC 1000 V, 250 A	1 PCS
1.1.3 Air-conditioning	3 kW	1 PCS
1.1.4 Fire extinguisher system	Gas aerosol, smoke & temp. detectors	1 set
1.2 Transformer	125 kVA, AC 400/400	1 PCS — optional
1.3 PCS	125 kW / AC 400 V	1 PCS
1.4 STS	300 kW / AC 400 V	1 PCS
1.5 MPPT	60 kW / DC 0–600 V	2 PCS
1.6 Energy management system	Local EMS	1 set
1.7 Cabinet cabling	Power & communication cables	1 set
1.8 Cabinet	—	1 PCS
1.9 Information & drawings	Includes user manual	1 PCS

SAFETY INSTRUCTIONS

Danger	High-voltage DC — risk of fatal shock. Only trained personnel may operate.
Warning	Never disconnect connectors while running. Do not open or deform the battery module.
Pay attention to	Disconnect power before maintenance. Incorrect use can permanently damage the battery.

PROCESSING SPECIFICATION — BATTERY DISPOSAL

Batteries must be disposed of per applicable waste-battery regulations — never as household waste. Discontinue use of any damaged battery immediately and contact your installation partner. Used batteries may contain pollutants harmful if mishandled, but also recoverable raw materials such as iron, zinc, manganese, copper, cobalt and nickel. The system is to be operated only by skilled, qualified personnel familiar with electrical system installation, the user manual and local regulations.