

EURONET HIGH VOLTAGE ENERGY STORAGE BATTERY

160.76 kWh Max Cluster Energy | 512 V Max Cluster Voltage | 314 Ah LiFePO₄

The Euronet High Voltage Rack Energy Storage Series is a high-voltage DC battery system designed for solar and battery energy storage installations. A high-voltage box (BCU) pairs with up to 10 lithium battery modules connected in series inside a wall-mounted rack, delivering up to 512 V and 160.76 kWh per cluster. CAN and RS485 communication integrates the system with the PCS, host computer and display, while LED status indication reports capacity, faults and protection states.



6 KEY HIGHLIGHTS



High-Voltage Architecture

16S1P modules connected in series for up to 512 V per cluster.



Modular Scalability

One to ten modules per cluster, with up to 28 clusters in parallel.



Grade-A LiFePO₄ Cells

Brand-new Grade A cells rated >6000 cycles @80% DOD, 0.5C, 25°C.



CAN & RS485 Communication

Integrates directly with the PCS, host computer and display.



Active Cluster Balancing

Active balancing per cluster with independent cluster control.



LED Status Indication

Local panel reports capacity, fault and protection states.

GENERAL

Model	E-HVL51314K16	Technical data sheet Rev. 1.0
Product type	High voltage rack energy storage series	High-voltage DC battery system
Application	Solar & BESS installations	
Max cluster energy	160.76 kWh	At 10 modules per cluster
Max cluster voltage	512 V	160S1P
Cluster capacity	314 Ah	Constant across all configurations
Max modules per cluster	10	51.2 V series
Parallel connection	Up to 28 clusters	160.76 kWh to 4.5 MWh+
Enclosure	Wall-mounted rack	
Installation	Qualified personnel only	High DC voltage

BATTERY MODULE

Nominal voltage	51.2 V
Nominal capacity	314 Ah
Nominal energy	16.076 kWh
Configuration	16S1P
Max modules / cluster	10
Mounting	Wall-mounted rack

BATTERY CLUSTER (MAX CONFIGURATION)

Cluster voltage	512 V	160S1P
Cluster capacity	314 Ah	
Cluster energy	160.76 kWh	
Parallel connection	Up to 28 clusters	
Balancing	Active, per cluster	
Control	Independent per cluster	

CELL

Cell chemistry	LiFePO4	
Cell grade	Brand-new, Grade A	
Cycle life	>6000 cycles	@80% DOD, 0.5C, 25°C

ELECTRICAL RATINGS

Max continuous charge / discharge	157 A	
Max charge / discharge (60 s)	314 A	Peak, 60 seconds
Control unit	High-voltage box (BCU)	Control, protection & balancing
Status indication	LED — capacity / fault / protect	

COMMUNICATION & MONITORING

Interfaces	CAN / RS485	
Integrates with	PCS, host PC, display	
Local indication	LED status panel	

MODULE SCALABILITY (51.2 V SERIES, PER CLUSTER)

1 module	51.2 V	16.08 kWh
2 modules	102.4 V	32.15 kWh
3 modules	153.6 V	48.23 kWh
4 modules	204.8 V	64.30 kWh
5 modules	256 V	80.38 kWh
6 modules	307.2 V	96.46 kWh
7 modules	358.4 V	112.53 kWh
8 modules	409.6 V	128.61 kWh
9 modules	460.8 V	144.68 kWh
10 modules	512 V	160.76 kWh

Capacity is 314 Ah across all configurations. Up to 28 clusters may be paralleled for systems from 160.76 kWh to 4.5 MWh+.

SCOPE OF SUPPLY

1 High voltage battery system	E-HVL51314K16	1 set
1.1 Battery module	51.2 V, 314 Ah, 16.076 kWh, 16S1P	≤10 PCS — per cluster
1.2 High-voltage box (BCU)	Control, protection & balancing unit	1 PCS
1.3 Wall-mounted rack	Holds up to 10 modules	1 PCS
1.4 Communication cabling	CAN / RS485	1 set
1.5 Power cabling & connectors	Inter-module & BCU cabling	1 set
1.6 Mounting hardware	Wall brackets & fasteners	1 set
1.7 Information & drawings	Includes user manual	1 PCS

INSTALLATION ENVIRONMENT

Installation type	Indoor, wall-mounted only	
Ambient conditions	RH <95%, no condensation	No corrosive gas

TRANSPORT & HANDLING

Shipping state of charge	40–50% SOC
Handling	Avoid shock, vibration and inversion

STORAGE

Storage conditions	0°C–45°C, RH ≤90%	Keep at 50–60% SOC
Maintenance charge	Recharge every 3 months	

SAFETY INSTRUCTIONS

Danger	High DC voltage — risk of fatal shock. Only trained personnel may operate.
Warning	Never disconnect connectors while energized. Do not open or deform battery modules.
Pay attention to	Disconnect power before maintenance. Follow site planning & unpacking guidance strictly.

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. Installation and maintenance must be carried out only by qualified personnel familiar with electrical safety requirements and lithium battery systems, as the unit operates at high DC voltage.