ecoBatteryHub

Industrial-quality battery storage with a professional energy management platform

The ecoBatteryHub is a stationary battery storage system offering a comprehensive solution for energy management, charging/load management, and automation of building technology. The standardized, modular system, comprising both hardware and software, is designed for use in multi-family homes, as well as commercial, agricultural, and industrial settings. Its integrated and flexibly expandable industrial control system allows for a range of applications, from simple storage functions like self-consumption optimization and emergency power to complex smart building scenarios across entire premises. The open-technology concept is strictly focused on future viability and seamlessly integrates the battery storage system with energy generators and consumers in the building, regardless of the manufacturer.

Modular expandable

Scalable from 26 to 390 kWh capacity and 16 to 150 kVA charging/discharging power; optionally expandable with modules for emergency power, charging and energy technology

Industrial Quality

Hardware components from globally established manufacturers; product concept and software developed in Switzerland

IoT Platform

Holistic, cross-sector control, automation and digitalization of energy & building technology

Open-technology

Direct integration and communication with heat pumps, heating inserts, meters, CHP units, AC & DC charging infrastructure, and more.

Professionally Online

App and web interface for monitoring, control, and commissioning; tailored for end users, technicians, and administrative staff

Service-Platform

Multi-tier partner portal for digital and personalized support, from manufacturer to installer to end user

ecocoach AG | Gersauerstrasse 71 | 6440 Brunnen | Switzerland | +41 41 811 41 41 | info@ecocoach.com | ecocoach.com
ecocoach DE GmbH | Neuburger Strasse 57 | 85057 Ingolstadt | Germany | +49 30 6823 8080 | info@ecocoach.com | ecocoach.com

Peak Load Capping
Regulation to maximum total output

Load Management
Regulation to the maximum current per phase

Emergency Power
Isolation from failed grid supply, establishment of a building network and short-term supply with stored battery capacity

Multi-Use
Combination of self-consumption optimisation, peak load capping, load management and/or emergency power

Seamless Energy Management
Fine-tuned control of consumers to precisely set the power currently being used

Step-Switched Energy Management
Control of defined power levels or on/off control of consumers

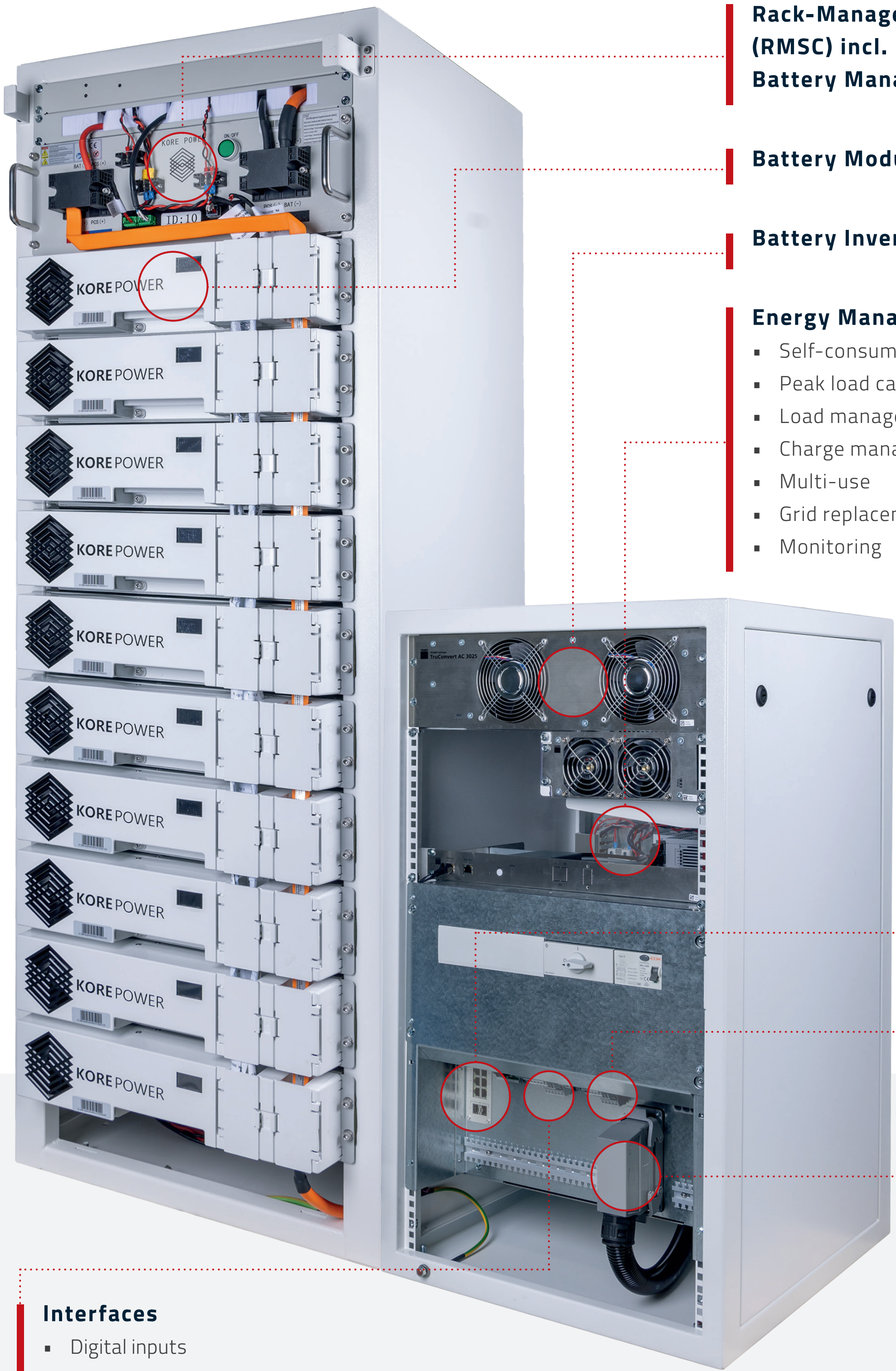
Backup power capable of black start
Isolation from grid supply, construction of building grid & activation of existing generators (PV, CHP, etc.) for building supply and for charging the battery as supply storage

Synchronising Generators
Activation/deactivation and power control of PV, CHP and other generators in backup power mode for intelligent self-sufficiency

Technical data

Basic specifications	Integrated battery inverter, energy management, preparation for external NA protection, residual current protection	
Areas of application	Self-consumption optimisation, peak load capping, load management per phase, electromobility charging management, emergency power supply operation and monitoring	
System topology	AC-coupled battery storage system	
Scalability (cascading)	Primary and secondary function for up to six systems with a total of 390 kWh. More on request.	
Interfaces for energy management and Electromobility according to compatibility list	▪ 4x digital inputs ▪ 6x digital outputs, potential-free ▪ M-Bus (max. 40 meters) ▪ SG ready	▪ RS485 ▪ Modbus TCP ▪ Modbus RTU for XRGI® CHP ▪ Modbus RTU for ecoEnergyMeter
Nominal voltage	400 V AC (3L, N, PE), 50 Hz	
Nominal current	37 A	
Protection of the supply line	50 A	
Battery capacity	Min. 4, max. 10 battery modules, capacity of 6.5 kWh gross each, total capacity max. 65 kWh gross	
Storage technology	Cell type lithium-ion (NMC), voltage ecoBatteryUnit nominal 59.6 volts DC x number of battery modules, modules comply with UL1973, IEC 62619 and UN38.3 standards	
Charging and discharging power inverter	Up to 25 kVA, overload capacity in charging and emergency power supply mode 150 % (1 min.) or 120 % (10 min.)	
Inverter efficiency	Max. 93 %	
Cooling principle	Air cooled	
Protection class	IP20	
Ambient temperature	5 °C to 35 °C, optimum 23 °C, humidity 5 % to 80 % (non-condensing)	
Degree of soiling	2	
Installation height	Max. 2000 m NN	
Dimensions (BxHxT)	ecoPowerUnit: 55 x 100 x 60 cm ecoBatteryUnit: 55 x 160 x 60 cm	
Weight	ecoPowerUnit: 90 kg ecoBatteryUnit: Empty rack weight 125 kg max., 41 kg additional per module	
Sound emission level (1m distance from the housing)	< 70 dB(A)	
Standards and guidelines	CE | IEC 62477-1:2012 + A1:2016 | IEC 62619 | VDE-AR-N 4105:2018-11 | TOR generator type A | OVE guideline R 25:2020 | EN 61000-6-2:2019 | EN 61000-6-4:2019 | IEC 63000:2018	

ecocoach AG | Gersauerstrasse 71 | 6440 Brunnen | Switzerland | +41 41 811 41 41 | info@ecocoach.com | ecocoach.com
ecocoach DE GmbH | Neuburger Strasse 57 | 85057 Ingolstadt | Germany | +49 30 6823 8080 | info@ecocoach.com | ecocoach.com



Rack-Management-Control-System (RMSC) incl. Battery Management System

Battery Module 6.5 kWh

Battery Inverter

Energy Management
- Self-consumption optimisation
- Peak load capping
- Load management
- Charge management
- Multi-use
- Grid replacement
- Monitoring

Switch & Firewall

Preparation of external NA protection

Pre-assembled cable for the battery connection

Interfaces
- Digital inputs
- Digitale outputs, potential-free
- M-Bus (max. 40 meters)
- SG ready
- RS485
- Modbus TCP
- Modbus RTU for XRGI® CHP
- Modbus RTU for ecoEnergyMeter

ecocoach AG | Gersauerstrasse 71 | 6440 Brunnen | Switzerland | +41 41 811 41 41 | info@ecocoach.com | ecocoach.com
ecocoach DE GmbH | Neuburger Strasse 57 | 85057 Ingolstadt | Germany | +49 30 6823 8080 | info@ecocoach.com | ecocoach.com