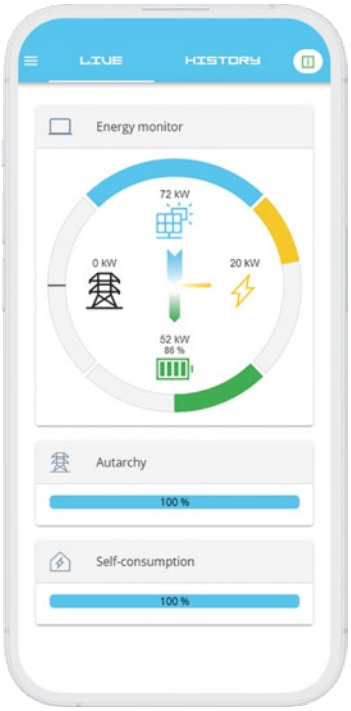
FENECON

The efficient commercial battery energy storage system

COMMERCIAL 92





Key Facts

92–460

Power in kW

84–1.050

Capacity in kWh

Benefits

- Self-Consumption Optimization 2.0 with AI-optimized utilization of time-of-use tariffs*
- Peak shavingto reduce electricity charges*
- Flexible integration of additional producers and consumers*
- Intelligent integration of e-mobility charging infrastructure, heat pumps and heating elements*
- Including 3-phase sensor for the grid-connection point
- Plug-&-Play installation
- All-in-one system featuring a compact high-voltage battery, an efficient battery inverter, intelligent energy management system FEMS and full service by FENECON
- Ready for your Energy Journey: Modularly expandable with battery towers and FEMS apps

* FEMS App Self-Consumption Optimization and FEMS App Grid-Optimized Charging included. Further apps available optionally.

System

Product warranty 10 years



Installation / Ambient conditions	
Ingress Protection	IP55
Operating altitude in m	≤ 2,000
Installation/operating temperature in °C	-20 to +45
Operating temperature in °C*	-20 to +55
Optimal battery operating temperature in °C*	+15 to +30

* Outside of the optimal operating temperature range, the (dis-)charging performance may be reduced.

Meter	
Communication interface	Modbus RTU
Transformer ratios	x/5 & x/1

Certifications and Directives	
Overall system	CE VDE 2510-50
Inverter	VDE 4105 VDE 4110
Battery	UN38.3 IEC62619 EMV (complete)

Battery module



Battery	
Cells technology	Lithium iron phosphate (LiFePO4)
Module weight in kg	29.6
Nominal module capacity in kWh	2.87
Usable capacity per battery module in kWh	2.8
Capacity warranty	12 years or 6,000 cycles

Battery tower	
Dimensions (W|D|H) in mm	506 | 401 | 2550
Double socket Dimensions (W|D|H) in mm	1,312 I 401 I 1,406
Nominal capacity per battery tower in kWh	43.01
Usable capacity per battery tower in kWh	42
Weight in kg	487
Expandable through parallel connection	Yes

Inverter

KACO blueplanet gridsave 92.0 TL3-S



AC connection	
Grid connection	400 V, 3L/PE, 50/60 Hz
Operating voltage range (Ph-Ph) in V	300 - 580
Nominal AC output power in VA	92,000
Max. AC output power in VA	92,000

General specifications	
Ingress Protection	IP66
Humidity in %	0 to 100
Dimensions (W|D|H) in mm	699 | 450 | 719
Weight in kg	80
Max. efficiency in %	charging: 98.5 discharging: 98.7

For further details, please refer to the KACO data sheet.

Parallel switch box



General	
Max. operating voltage in V DC	800
Max. continuous current in A	145
Ingress Protection	IP55
Dimensions (W|D|H) in mm	606 | 163 | 639
Weight in kg	27

System configurations



Towers per inverter	2	3	4	5
Usable capacity in kWh*				
1 inverter	84	126	168	210
2 inverter	168	252	336	420
3 inverter	252	378	504	630
4 inverter	336	504	672	840
5 inverter	420	630	840	1,050
Nominal power in kW**				
1 inverter	67		92	
2 inverter	134		184	
3 inverter	201		276	
4 inverter	268		368	
5 inverter	335		460	
Weight in kg	974	1,461	1,948	2,435

* From DC side at 25 °C and 0.2 C

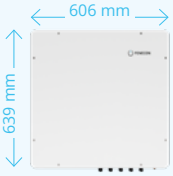
** Average power at nominal voltage; actual power depends on other factors such as state of charge, ambient temperature, cells temperature and residual capacity.

Detailed information about the cluster system can be found here on our website.

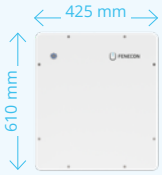
Inverter



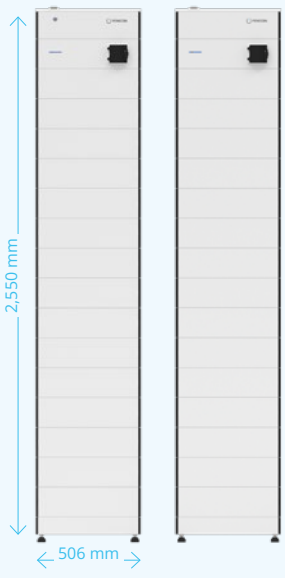
Parallel switch box



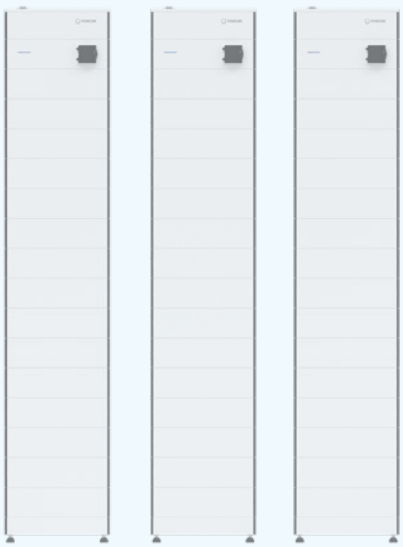
FEMS Cluster Box



System variant
2 towers with 15 modules each



Expansion possible up to a system variant of 5 towers with 15 modules each



FEMS Hardware



Hardware interfaces	
Inputs	4 digital inputs
Output (FEMS relay board)	3 wet contacts (10 A per channel & metered) 2 dry contacts
Communication with external components	RS485 - Modbus RTU & LAN - Modbus TCP

Communication interfaces	
Internet connection	LAN
Local	Modbus/TCP-API, REST-API (read access, write access optional)
Online	Cloud REST API (read access, write access optional)

Software & future capability	
Operating system	FEMS, based on OpenEMS (Open Source)
Classification	OpenEMS Ready Gold
Updates	Unlimited, automatic & free of charge
Feed-in management	0% (e.g., outside EEG) up to 100%
Dynamic ripple controller	Standard

Advanced charging & discharging	
Grid optimized charging	Standard
Time-off-use tariffs & time-variable grid charges	Optional (compatible tariff required)
Peak shaving	Optional

Options for sector coupling	
Heating element controller	Optional
Heat pump control „SG-Ready“	Optional
Threshold controller	Optional
Manual relay controller	Optional
Wallbox controller	Optional
Controller for multiple wallboxes	Optional
Integration of additional consumers and producers	Optional

FEMS

FENECON Energy Management System



A system that selects the best route every day.

Essential

FEMS is the heart of your energy system and is fully integrated into the energy storage system as a compact module right from the start.

Future-proof

Thanks to FEMS, your energy storage system remains ready for whatever the future may bring. Optional FEMS apps allow you to expand your system with new devices, ideas, and possibilities at any time. All easily implemented thanks to our manufacturer-independent open-source approach.

Intelligent

FEMS ensures optimal utilization of the energy you have generated. The AI-based forecast creates a holistic, customized energy roadmap in real time that takes into account weather data, consumption profiles, tariffs, and grid conditions.

More info about FEMS

Test it yourself with our demo access

FENECON GmbH
Gewerbepark 6
94547 Iggensbach
Germany

+49 9903 6280-0
info@fenecon.de
www.fenecon.com

More info about the product

© FENECON GmbH 2026/07 - MAR1138 - Illustrations are similar, subject to printing errors and technical changes.