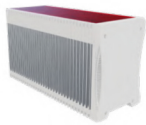




## + Cell LC01

Chemistry	LiFePO4
Nominal Capacity	50 Ah
Nominal Energy	160 Wh
Nominal Voltage	3.2 V DC
Dimension (T x W x L)	12 x 194 x 218 mm
Weight	0.95 kg



## + Kombi Module for LiSTORAGE

Cells Type	LC01
Nominal Capacity	100 and 200 Ah *
Nominal Energy	5.2 kWh *
Nominal Voltage	51.2 and 25.6 V DC *
Dimension (L x W x H)	478.75 x 198 x 274 mm*
Weight	~ 35 kg*



## + LiSTORAGE 10.2

Module Type	2x Kombi Module
Nominal Capacity	100 and 200 Ah *
Nominal Energy	up to 10.2 kWh *
Nominal Voltage	102.4 and 51.2 V DC *
Dimension (L x W x H)	540 x 707 x 202 mm*
Weight	~ 90 kg*



## + LiRACK LiR10

Rack Type	LiR10
Nominal Capacity	from 100 up to 2000 Ah *
Nominal Energy	up to 102.4 kWh *
Nominal Voltage	102.4 and 51.2 V DC
Dimension (L x W x H)	600 x 800 x 2400 m
Weight	~ 1000 kg*



## + LiBESS LiB20 / LiB40

DC Technical Characteristics	
Cabinet Type	LiRack LiC40
Nominal Energy	up to 4,3 MWh *
Nominal Voltage	512 and 1024 V DC
Dimension	20 up to 40 ft *

\* Other configuration are available upon request

## INNOVATIVE SOLUTIONS FOR BEST PERFORMANCE

### Kombi Module Series

Kombi series products represents the most innovative solution in energy storage for all uses: The long life, the charging speed, the absence of maintenance make the Kombi modules the perfect solution where performance, durability, safety and energy efficiency must not compromise.

For ESS the modules use one of two type:

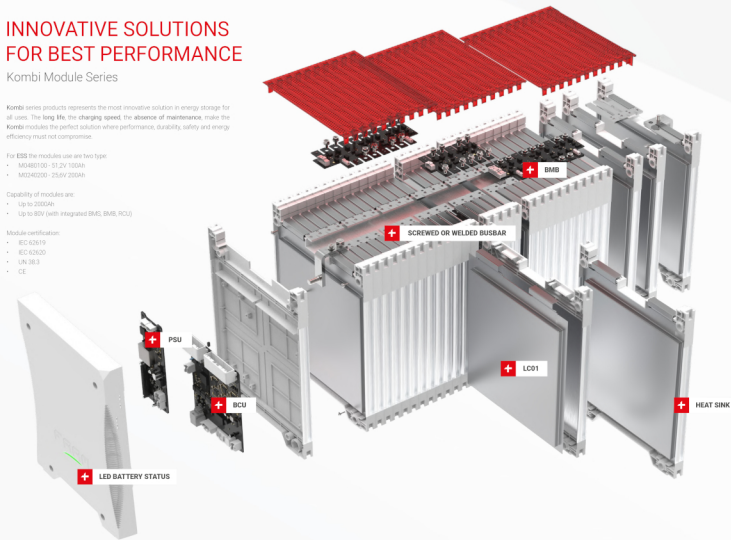
- MMS1000 - 51.2V 100Ah
- MMS2000 - 25.6V 200Ah

Capacity of modules are:

- Up to 2000Ah
- Up to 80V (with integrated BMS, EMS, PCS)

Module certification:

- IEC 62040
- IEC 62050
- UN 38.3
- CE



## FAAM LC01 CELL

The First Italian Lithium Cell



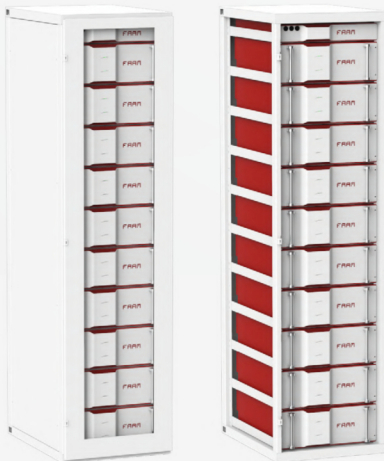
LC01 / 50Ah	
Battery Chemistry	LFP
Nominal Capacity	Ah 50
Capacity Usable (DoD 80%)	Ah 40
Nominal Energy	kWh 160
Energy Usable (DoD 80%)	kWh 128
Nominal Voltage	V DC 3,2
Minimum Voltage (Cut-off)	V 2,5
Maximum Voltage	V 3,65
Nominal Current in Discharge	A 50
Maximum Continuous Current in Discharge (25°C)	A 100
Peak Current in Discharge (10s)	A 150
Nominal Current in Charge	A 12,5
Maximum Continuous Current in Charge (25°C)	A 50
Nominal Power in Discharge	W 160
Maximum Continuous Power in Discharge (25°C)	W 320
Peak Power in Discharge (10s)	W 480
Nominal Power in Charge	W 40
Maximum Continuous Power in Charge (25°C)	W 160
AC IR	mΩ max 2,0
DC IR	mΩ max 3,0
Efficiency (25°C)	% 98
Estimated Life	> year 10
Estimated Life in Cycles (25°C, DoD 80%)	> 4000
Functioning Temperature in Discharge	°C -20 / +55
Functioning Temperature in charge	°C 0 / +45
Optimal Functioning Temperature	°C 23±3
Storage Temperature	°C 23±3
Self Discharge	%/month 2
Operating Condition for Humidity	R.H. 0+60
Thickness	mm 12.65 ±
Width	mm 194.1 ± 1
Length	mm 219.5 ± 1
Weight	Kg 0.95
Energy density - Volumetric	Wh/l 297
Energy density - Gravimetric	Wh/Kg 167





## LiRACK

Cabinet Standard Rack 19"



LiR houses our racks LiStorage 10.2., thanks to an evolved system of plug & play connections.

With LiR you'll have the flexibility to configure your own system as desired.

The maximum slots available for LiR are 10. Smaller sizes allow you to storage fewer racks and the space inside ensures that a control module for the entire string is also housed.

You can configure each LiR10 up to a maximum of 10S or 10P. The string is controlled through the FAAM head-module and can be set and monitored in real time through an HMI installed on the front cabinet, or even remotely whenever and wherever you prefer.

The ESS system is designed: in POWER configurations to reach a maximum current of 40 0A at a nominal working voltage up to 1024VDC.

In the parallel configuration each LiStorage 10.2 is independent with its own slave BMS, which controls the opening of a contactor, protected by a fuse. This makes the system safe and easy to be armed and maintained.

The Head-module guarantees the necessary protections in the series configuration, inside two contactors and fuse, which LiStorage 10.2 are in any case protected by a fuse sized for the working voltage.

## FROM THE RACK TO THE TURNKEY SOLUTIONS



### ENERGY

### POWER

#### LiR-E

Up to 1024V DC / Up to 2000Ah (1C)

#### LiR-P

Up to 1024V DC / Up to 2000Ah (2C)

LiStorage 10.2  
E-100V

LiStorage 10.2  
E-48V

LiStorage 10.2  
P-100V

LiStorage 10.2  
P-48V

← FOR ALL APPLICATION →

RE/Power Integration

Grid Support

Commercial & Industrial

Mini Grids

Off-Grid Industrial

Re-Charge

