LIONTRON®
Lithium LiFePO4

Datasheet

LIONTRON LiFePO4 LX48-100 - 100Ah / 5,12 kWh

The LIONTRON® LX48-100 is a modular LiFePO4 memory for highest demands. Due to its long cycle life, the memory is ideally suited as a storage battery for photovoltaic systems, inverters or a self-sufficient power supply.

Highest safety and a very long lifetime are guaranteed thanks to high-quality LiFePO4 cells and the latest BMS technology, even with regular deep discharges. The accumulator enables fast efficient charging and a very high discharge current.

By simply connecting several memory modules together, an increase in capacity can also be easily achieved at a later date.

Modell	LIST48100
EAN / GTIN	4260586371086
Rated capacity	100Ah / 5120Wh
Voltage range	43,2-58,4V
Rated voltage	51,2V
Cycle life	≥3000 bei 90% DoD
Charge characteristic	CCV / IU
Bulk voltage	58,4±0,2V
Float voltage	54,0 – 55,2V
Max. charge current	< 110A
Max. discharge current	< 110A
Battery Management System	integrated
Interfaces	RS485, RS232, CAN
Scalable	serial and parallel .
Weight	43,8 kg
Warranty	10 years[1]
Dimensions (L x W x H) in mm	618 x 430 x 133
Temperature (discharge)	-15°C .. +65°C
Temperature (charge)	0°C .. +60°C
Temperature (storage)	-15°C .. +65°C
Certification and standards	CE, RoHS, UN 38.3, MSDS

[1] Fair value replacement guarantee, observe guarantee conditions

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Integrated BMS in each module

The storage system has a modular design. Each module is a fully functional memory with an independent integrated battery management system, or BMS for short.

It constantly monitors the status of the cells and protects them against overcharge, overvoltage and overtemperature, among other things. A defect of the storage battery due to environmental influences or incorrect use is thus prevented in advance.

Protection	Shutdown conditions	Restart conditions
Overvoltage	Battery voltage > 58,4V or cell voltage > 3.7V	Battery voltage < 54V or cell voltage < 3.38V
Undervoltage	Battery voltage < 43.2V or cell voltage < 2.7V	Battery voltage > 47.2V or cell voltage > 2.95V
Discharge current	Discharge current > 110A (>1s.) or Discharge current > 150A (100ms)	Automatic restart after 60s (after 3 repeated shutdowns within 5min the battery must be manually released by holding the RESET switch)
Charging current	Charging current >110A (>1s.)	Automatic restart after reduction of the charging current
Short circuit	Current > 350A (≦ 300 µS)	Automatic reconnection after 60s or when the battery is charged (after 3 repeated disconnections within 5min the battery must be manually released by holding the RESET switch)
Overtemperature	>65°C while charging or >70°C while discharging	<55°C while charging or <60°C while discharging
Undertemperature	< -5°C while charging or < -20°C while discharging	> 0°C while charging or > -15°C while discharging