

Datasheet

Mestic LiFePO4 lithium battery MLBS-300mc smart

The Mestic Lithium batteries deliver smart technology, high performance and maximum safety for every camper, caravan or leisure boat. Their weight is up to 50% less compared to traditional AGM or gel batteries and built with premium Grade A prismatic LiFePO4 cells. LiFePO4 cells ensure stability, long lasting power and excellent durability. With smart connectivity and a compact design, you can enjoy reliable energy wherever you travel, without compromise.

Features

- **Built in heating for charging in extreme cold conditions:** the integrated heater ensures safe charging under 0 °C.
- **Compact, customized casing:** space saving metal housing with shock resistant and fire retardant construction, to fit the limited space of your vehicle (e.g. under the seat of Fiat Ducato).

Communication

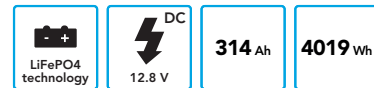
- **Built in display:** always instant insight without a smartphone: charge level, status messages and warnings via LED indicators and on/off button.
- **Full smart connectivity:** WiFi, Bluetooth®, RS485, CAN and CiBus for seamless system integration, real time monitoring and advanced control.
- **Mestic smart app for instant insight:** wireless monitoring of capacity, voltage, temperature and charge status, supported by smart diagnostic tools.

BMS and Protection

The intelligent Smart BMS (Battery Management System) provides complete battery protection for safe and stable performance in every situation. It prevents overcharge, over-discharge, overcurrent and overheating, while advanced cell balancing ensures long term reliability even under heavy loads.



MLBS-300mc smart



- LiFePO4 lithium technology for high power and maximum safety
- Integrated BMS and advanced communication interfaces
- Heating function for charging down to minus 20 °C
- Long life cycle (>8000 cycles at 100% DoD)
- IP65 waterproof class
- LED status display
- Durable and safe metal housing with compact design
- Lightweight and maintenance free
- 5 year warranty



Works seamlessly with
the Mestic smart app

WiFi Bluetooth



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Product

Article No.	1518990
EAN-code	8712757494576

Electrical data

Nominal voltage	12.8 V
Open circuit voltage	13.2 V
Nominal capacity	314 Ah
Capacity tolerance	2%
Capacity @ 20 A	942 min
Energy	4019 Wh
Resistance	<5 mΩ
Self-discharge	<3% per month
Cycle life (at 0.5C, 25 °C, 100% DoD, 80% EoL)	>8000 cycles

Charging performance

Recommended Charge voltage	14.2~14.6 V
Charge Cut-Off voltage	14.8 V (3.7 V/cell)
Reconnect voltage	13.52 V (3.38 V/cell)
Balancing voltage	>3.4 V/cell
Recommended Charge current	94.2 A
Maximum Charge current	150 A
Maximum batteries connection	4 in series / 8 in parallel

Discharging performance

Discharge Cut-Off voltage	10 V
Reconnect voltage	11.6 V
Maximum continuous Discharge current	200 A
Peak Discharge Cut-Off Current	220 A@5 sec, 300 A@200 msec
End of Discharge Voltage	11.2 V
Short circuit protection	500 μs

Mechanical data

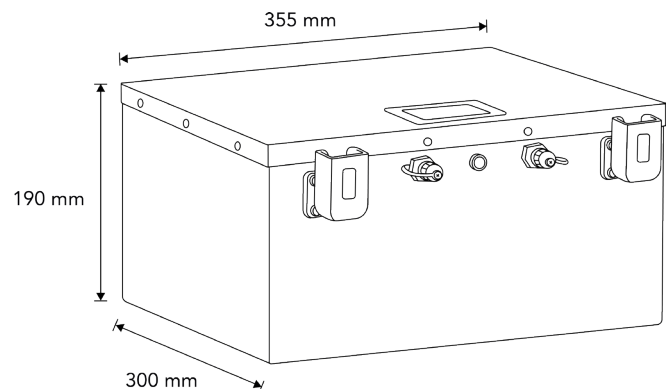
Weight	33.3 kg
Case material	Metal (SPCC)
IP-class	IP65
Cell type	Prismatic/LiFePO4
Terminal type	M8

Temperature performance

Charge temperature	-20~50 °C
Discharge temperature	-20~55 °C
Storage Temperature	-20~55 °C
BMS High temperature Cut-Off)	90 °C
Reconnect temperature	80 °C
Operation Relative Humidity	0-95%

Dimensions

Dimensions (L x W x H) with terminals	355 x 335 x 190 mm
Dimensions (L x W x H)	355 x 300 x 190 mm



Compliance data

Certifications	CE, IEC61219, UN38.3, RoHS, MSDS, ECE R10
Shipping classifications	UN 3480; Class 9