

Datasheet

Mestic LiFePO4 lithium battery MLBS-300 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.
- **Customized casing:** ABS housing with shock resistant and fire retardant construction.
- **Detachable cover with removable SAE terminal poles:** for easy installation and service.

Communication

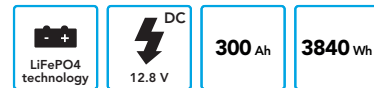
- **Built in display:** always instant insight without a smartphone: charge level, status messages and warnings via LED indicators and on/off button.
- **Full smart connectivity:** WiFi, Bluetooth®, RS485, CAN and CiBus for seamless system integration, real time monitoring and advanced control.
- **Mestic 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-300 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 (>3500 cycles at 100% DoD)
- IP65 waterproof class
- LED status display
- Durable and safe ABS housing
- Lightweight and maintenance free
- 5 year warranty



Works seamlessly with
the Mestic smart app

WiFi Bluetooth

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App Store

GET IT ON
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Mestic LiFePO4 lithium battery MLBS-300 smart

Product

| | |
|-------------|---------------|
| Article No. | 1518970 |
| EAN-code | 8712757494552 |

Electrical data

| | |
|--|---------------|
| Nominal voltage | 12.8 V |
| Open circuit voltage | 13.2 V |
| Nominal capacity | 300 Ah |
| Capacity tolerance | 2% |
| Capacity @ 20 A | 900 min |
| Energy | 3840 Wh |
| Resistance | <5 mΩ |
| Self-discharge | <3% per month |
| Cycle life (at 1C, 25 °C, 100% DoD, 80% EoL) | >3500 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 | 90 A |
| Maximum Charge current | 200 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

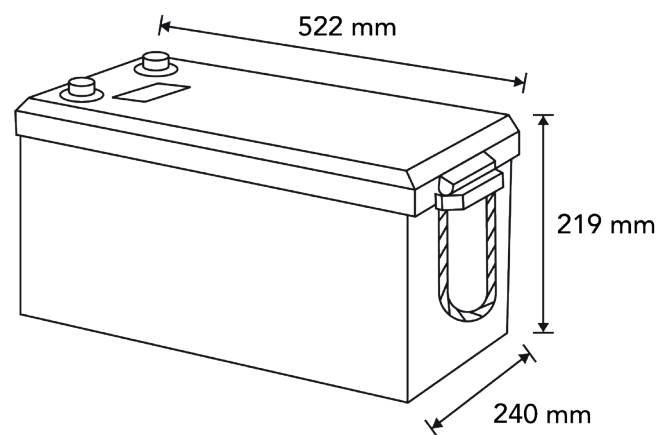
| | |
|---------------|-------------------|
| Weight | 32.0 kg |
| Case material | PC/ABS (UL94 V-0) |
| IP-class | IP65 |
| Cell type | Prismatic/LiFePO4 |
| Terminal type | M8/SAE |

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) | 522 x 240 x 219 mm |
|------------------------|--------------------|



Compliance data

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