

MLI-E 12/1200



Product code: 66011200

The Mastervolt MLI-E Lithium Ion battery closes the gap between the very compact MLS battery and the successful high capacity MLI Ultra series. The MLI-E is ideal for applications where long lifespan, light weight, fast charging and compactness are key. Its practical form factor makes the MLI-E perfectly suitable for mobile applications.

Compact, maintenance free power, ideal for mobile applications

Lithium Ion has many advantages over lead-acid. The MLI-E saves up to 70 % in space and weight, recharges in less than an hour, and deep cycles 5.000 times easily, which is up to 10 times longer than lead-acid batteries. The MLI-E can replace a 180-200 Ah lead-acid battery. Also, for the MLI-E the extremely safe Lithium Ion (LiFePO4) chemistry is used.

No external safety relay is needed. The MLI-E is protected against overcharging, deep discharging and overheating and comes with an integrated electronic safety switch. With its plastic case, the MLI-E is a straight-forward replacement for most lead-acid batteries.

LED indicators inform you about the actual status of your battery. Of course, the MLI-E is provided with integrated battery monitoring, including information about state of charge and time remaining. For optimal integration in both mobile and maritime power systems, both NMEA2000 / CZone and CANopen protocols are supported. Needless to say, the MLI-E fits perfectly into a MasterBus system, when combined with our system monitor EasyView 5*. And last but not least: hands-on monitoring is available, using Bluetooth and a mobile app.

Features

- Very long lifespan, maintenance free.
- Fast charging and discharging, fully charged within an hour.
- Straight-forward replacement for most existing lead-acid batteries (EqPb: 200 Ah).
- Compact, practical size.
- Extremely safe Lithium Ion chemistry (LiFePO4).
- Integrated safety switch for quick and easy installation.
- High performance even under harsh conditions.
- High efficiency and low self-discharge.
- Integrated battery monitoring for reliable battery status information.
- System integration via NMEA2000 / CZone, CANopen or MasterBus (via EasyView 5*).
- Monitoring via Bluetooth app possible.

Applications

Its size, weight, tough case and resistance to shocks makes the MLI-E ideal for mobile applications. Other applications range from marine, infrastructure, off-grid to industrial applications.

* Max. two MLI-E batteries per EasyView 5. Refer to manual for details.

Specifications

Communication & monitoring

Communication

LED indicators, CANopen, CZone/NMEA 2000 (through drop cable CZone/MasterBus, product code 77046000), MasterBus (through EasyView 5*, product code 77010310), Bluetooth (via mobile app)

General specifications

| | |
|---|---|
| Nominal battery voltage | 13.2 V |
| Nominal battery capacity | 90 Ah |
| Nominal battery energy capacity | 1200 |
| Cycle life | 3500 cycles at 80 % DOD at 25 °C, max. C3 charge and C2 discharge |
| Max. charge current | 90 A (1 C) |
| Continuous discharge current | 200 A (2.2 C) |
| Peak discharge current | 350 A (3,8 C) for 30 s |
| Battery monitoring | integrated |
| Terminals | automotive or M8 hexagon |
| Mounting position | mountable in multiple orientations, suitable for LN5 fastening brackets |
| Battery standard | Group 49, H8 |
| Max. outer dimensions (incl. terminals/grip handles), l x w x h | 353 x 175 x 190 mm 13.9 x 6.9 x 7.5 inch |
| Weight | 12.5 kg 27.6 lb |
| Delivered with | 2x automotive battery pole, 2x M8 bolt, hexagon tool, USB stick (with manual) |

Technical specifications

| | |
|-----------------------------------|---|
| Battery chemistry | Lithium Iron Phosphate (LiFePO4) |
| Temperature range (ambient temp.) | -20 °C to 60 °C (discharge), derating < 0 °C and > 45 °C / charge -10 °C to 45 °C, derating < 0 °C and > 45 °C °C -4 to 140 °F |
| Protection degree | IP51 |
| Parallel connection | yes, unlimited |
| Series connection | no |
| Protections | over voltage, under voltage, over-temperature |
| Safety disconnect | automatic, integrated |