

MLI Ultra 24/1250



Product code: 66021250

Heavy Duty, Extreme Performance

The MLI series deliver extreme Lithium Ion performance even under the harshest conditions, such as high charge and discharge currents, wet environments, mechanical shocks or vibrations. This is realized by combining our best Lithium-Iron Phosphate (LiFePO4) cells with a proprietary Battery Management System (BMS) inside a sturdy, waterproof housing.

The sophisticated Mastervolt BMS ensures optimal use of each individual cell. Integrated battery monitoring provides you with accurate and up-to-date information on the state of your battery. Integrated NMEA2000, CZone and MasterBus communication allows complete system integration, to ensure the best possible charging, while maximizing the lifetime of your battery.

Self-learning balancing algorithm

The MLI Ultra batteries are equipped with a self-learning balancing algorithm that predicts the behavior of each individual battery cell and balances proactively, resulting in a faster and more efficient charge cycle. The self-learning system eliminates unnecessary stress on the cells, resulting in an even longer Battery Cycle Life.

Freezing cold weather performance

The MLI Ultra 1250 comes with integrated thermal heat-pad and sophisticated low-temperature control to ensure maximum charging performance at freezing temperatures. In cold weathers it uses the connected charger to power the heat-pad and keep the battery cell temperatures above freezing point. This assures the fastest possible charging and full power capabilities even on the coldest days.

Integrated battery switch

The integrated battery safety switch disconnects the battery cells in case of abnormalities. This is based on smart algorithms analyzing all details of the battery condition such as charge current, temperature, cell details and more. Where other integrated switches have current limitations, the MLI Ultra 1250 will keep providing energy up to 200 Amps continuously.

Plug-and-play by Auto Configuration

Installing a Lithium Ion battery has never been easier. Wire the MLI Ultra 1250 to any supported Mastervolt charger, connect the communication cable and the battery automatically fully configures the charger to match the battery. In this way a smooth and worry-free charging experience is ensured without the need of any configuration tools.

Key features

- Ultimate performance, Heavy duty Lithium Ion batteries.
- BMS and LiFePO4 chemistry according to highest safety standards.
- Drop-in replacement for size Group 31 and Group 49 (85-90 Ah) batteries.

- More than three times the life span of traditional batteries.
- Saves up to 70 % in space and weight.
- High charge / discharge rate up to 2 C.
- Fast charging within 60 minutes.
- Series connection up to 48V possible.
- Integrated battery switch
- Integrated thermal heat-pad with control
- Integrated battery monitoring (Voltage, Current, State of Charge, Time Remaining).
- MasterBus communication with any Mastervolt Battery Charger or Smart Remote.
- CZone and NMEA2000 compatible.
- Fully waterproof.
- UN 38.3, CE, E-Mark and FCC certified
- Compliant to UL1973 and RVIA standards, TEI listed.

Specifications

General specifications

Nominal battery voltage	24 V
Nominal battery capacity	50 Ah
Nominal battery energy capacity	1250
Cycle life	3500 cycles at 80 % DOD at 25 0C, max. C/3 charge and C/2 discharge
Max. charge current	50 A
Recommended charge current	<= 25 A
Max. continuous discharge current	100 A
Maximum continuous charge current	50 A
Peak discharge current	250 A (10 sec.)
Battery monitoring	integrated
MasterBus communication	yes
CZone / NMEA 2000 communication	yes
Terminals	M8
Mounting position	upright (recommended) or either long side
Dimensions	yes
Max. outer dimensions (incl. terminals/grip handles), l x w x h	330 x 173 x 210 mm 13.0 x 6.8 x 8.3 inch
Product weight	15 kg 33.1 lb
Shipping weight	17,2 kg 37.9 lb
Compliance	CE, E-Mark, UL1642 (cells only), FCC, RVIA compliant

Technical specifications

Battery chemistry	Lithium Iron Phosphate
Protection degree	IP65 (electronics cabinet)
Parallel connection	yes, unlimited
Series connection	Yes, to 48 V
Protections	Over voltage, under voltage, over temperature
Safety relay	integrated
Safety relay controls	integrated