



olenergies

OlenBox series

LMax



ULTRA COMPACT



LIGHT WEIGHT



DESIGNED TO ENDURE



NO MAINTENANCE



USABLE IN ALL DIRECTIONS



UNLIMITED ASSEMBLY

WARRANTY
5
YEARS

TECHNICAL SHEET

POWERFUL **48 V** **35 Ah** **1.65 kWh** **DURABLE**

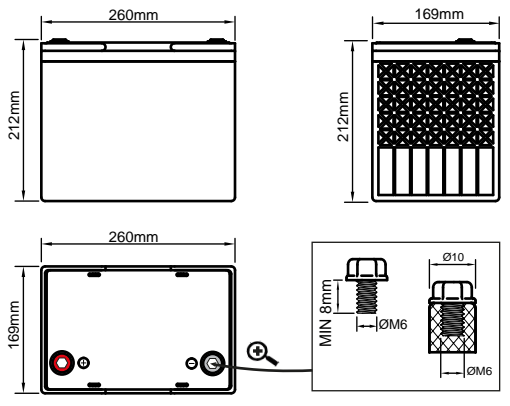
LITHIUM LFP-HP

MADE IN FRANCE



- Bluetooth
- Wi-Fi
- BOOST
- 30/+65°C

DIMENSIONS



THE MOST INNOVATIVE BATTERY ON THE MARKET

Battery connected Bluetooth	Control and monitor your battery using your smartphone! Use the application to configure, monitor, update and diagnose your battery. Real-time vision, complete control.
Remote monitoring Wi-Fi	Your battery accessible 24/7 from every part of the world Supervise, manage and optimize your OlenBox remotely and detect potential problems by setting alerts and alarms. You are always in control from anywhere in the world.
Active balancing! BOOST	Boosted performance and lifetime BOOST is a unique active and passive balancing technology. This guarantees a permanent and optimal internal balancing. Energy is transferred to the cells that need it.
Extreme temperature resistant -30/+65°C	Automatic preheating in very cold temperatures During the charge AND during the discharge! Don't worry about the outside temperature, the battery takes care of everything automatically! Working temperature -30°C +65°C Storage +15°C +35°C

MADE IN FRANCE INNOVATION

- ✓ High Performance Lithium LFP Technology
- ✓ Designed to last 20 years
- ✓ From 4,000 to 12,000 cycles (refer to curves)
- ✓ Smart-IoT Battery
- ✓ Fast charge
- ✓ Built-in safety mechanisms
- ✓ Designed for both hot and cold climates
- ✓ 60% lighter than a lead acid battery
- ✓ Compatible with MERLIN smartbox!

SPECIFICATIONS

Electrical	Rated voltage: 52.0 V Rated capacity: 32.0 Ah Energy: 1.66 kWh Internal resistance: < 100 mΩ Monthly self discharge: < 3 %	Mechanical	Casing material: ABS Dimensions (W*D*H): 260*169*212 mm Weight: 13.00 kg Terminals: M6 Ingress protection code: IP65
Charge	Charge efficiency: > 98 % @0.2C Charge voltage: 58.0 ± 0.1 V Charge mode: CC/CV Rated charge current: 15.0 A Charge cut-off current: 0.05C Lead-acid chargers: Compatible	Discharge	Discharge efficiency: > 96% @0.5C Direct discharge current: 35 A Maximum current 10 sec.: 105 A Minimum voltage: 40.0 V Configurable thresholds: Yes Exceeding power: On quotation

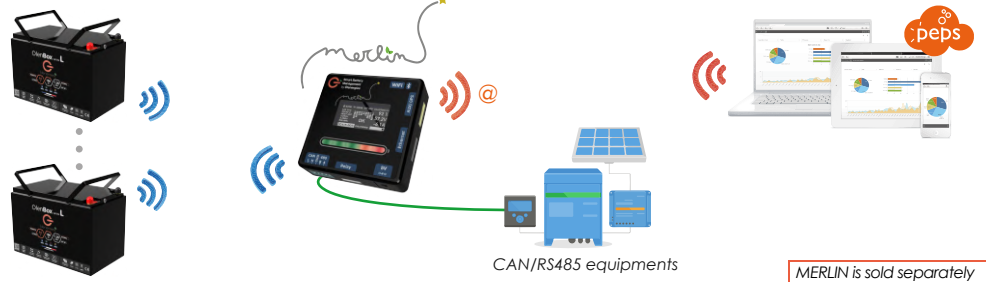
APPLICATIONS

- Lighting & Instrumentation**
Lighting, Camera, Energy case, Weather, Pumping...
- Martitime, mobility and robotics**
Boats, Recreational vehicles, Robots, Trolleys...
- Critical power supply**
UPS, Datacenter, Measurement, Medical...
- Solar storage**
Self-consumption, renewable energies...

QUALITY

- ✓ Certifications: CE, RoHS, UN38.3 (cells)
- ✓ Manufacturer warranty: 5 years
- ✓ Manufacturing country: France

Cluster your batteries wirelessly, add a display, pilot relays or add a GPS with MERLIN smartbox!



SMART BMS INSIDE

Lead acid Plug-&-Play

Charge: 15A -30°C | +50°C

Discharge: 35A -30°C | +65°C

Rated values 52V | 32Ah

Cells conform to UL STD 1642

RoHS

Li-ion



CURVES PROFILES



SAFE
DURABLE
POWERFUL

- ✓ 4,000 cycles @80% DoD @80% SoH
- ✓ 8,000 cycles @70% DoD @70% SoH
- ✓ 12,000 cycles @60% DoD @80% SoH



Longest service life on the market

Our systems are design to last up to 25 years, providing the lowest Total Cost of Ownership (TCO).



Eco-friendly

Circular Economy product.
Recyclable battery containing neither lead nor cobalt.



100% secure

LFP-HP chemistry is intrinsically safe and the BMS protect the battery. No risk of fire or deflagration.



Onboard intelligence

Our intelligent BMS detects any anomaly.
Connected batteries = 24/7 monitoring & supervision.



Fast charge

There is no need to follow a sequential curve.
Charging efficiency is close to 100%.

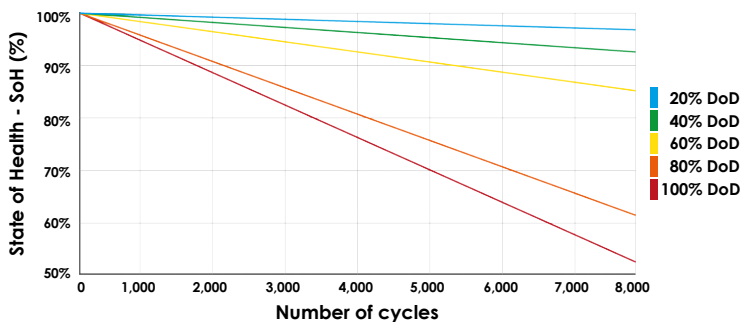


Extreme temperature resistant

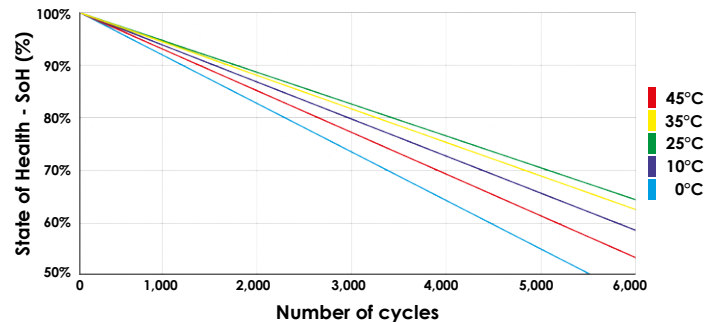
Olenergies systems are always the technological best choice for both hot and cold environments.

LIFETIME CURVES

State of Health (SoH) related to the number of cycles for different Depths of Discharge (DoD) @1C and 25°C

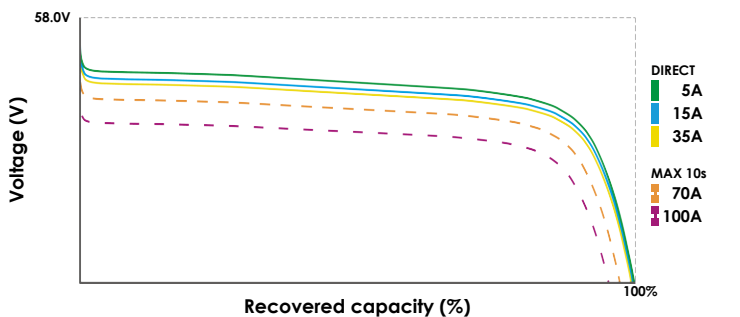


State of Health (SoH) related to the number of cycles for different temperatures @1C and 100% DoD

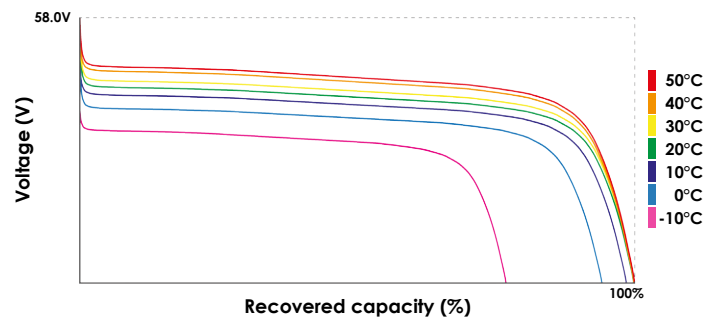


DISCHARGE CURVES

Voltage curves @25°C for various discharge currents

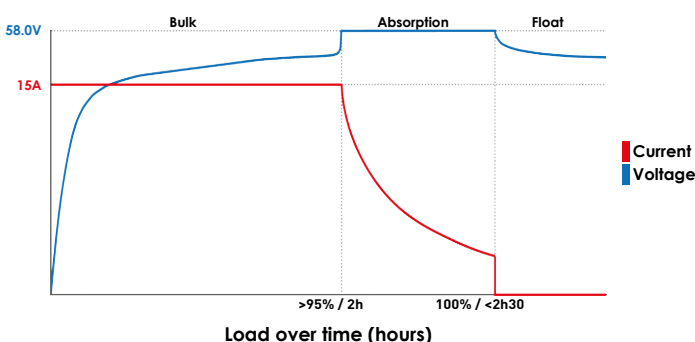


Voltage curves @C/5 for various temperatures



CHARGE CURVE

Constant Current/ Constant Voltage (CC/CV) recommended charge



SELF-DISCHARGE CURVE

Self-discharge according to time and storage temperature

