OlenBox series LMax

ULTRA COMPACT | LIGHT WEIGHT | DESIGNED TO ENDURE | NO MAINTENANCE | USABLE IN ALL DIRECTIONS | UNLIMITED ASSEMBLY

WARRANTY 5 YEARS

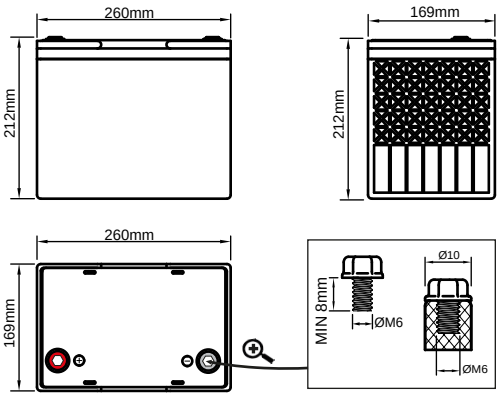
olenergies

TECHNICAL SHEET

POWERFUL | LITHIUM | 12 V | 130 Ah | 1.25 kWh | DURABLE | LFP-HP

MADE IN FRANCE

DIMENSIONS



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!**

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

THE MOST INNOVATIVE BATTERY ON THE MARKET

Battery connected	**Control and monitor your battery using your smartphone!**
Bluetooth	Use the application to configure, monitor, update and diagnose your battery. Real-time vision, complete control.
Remote monitoring	**Your battery accessible 24/7 from every part of the world**
Wi-Fi, peps	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!	**Boosted performance and lifetime**
BOOST, ACTIVE BALANCING	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	**Automatic preheating in very cold temperatures**
-30/ +65°C, HEAT	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

SPECIFICATIONS

Electrical		Mechanical	
Rated voltage	13.0 V	Casing material	ABS
Rated capacity	128.0 Ah	Dimensions (W*D*H)	260*169*212 mm
Energy	1.66 kWh	Weight	**13.00 kg**
Internal resistance	< 7.0 mΩ	Terminals	M6
Monthly self discharge	< 3 %	Ingress protection code	IP65
Charge		**Discharge**	
Charge efficiency	> 98 % @0.2C	Discharge efficiency	> 96% @0.5C
Charge voltage	14.5 ± 0.1 V	Direct discharge current	**130 A**
Charge mode	CC/CV	Maximum current 10 sec.	**390 A**
Rated charge current	65.0 A	Minimum voltage	10.0 V
Charge cut-off current	0.05C	Configurable thresholds	Yes
Lead-acid chargers	Compatible	Exceeding power	On quotation

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

MERLIN is sold separately

MANUAL

SMART BMS INSIDE | Lead acid Plug-&-Play | Charge: 65A -30°C I +50°C | Discharge: 130A -30°C I +65°C | Rated values 13V I 128Ah | Cells conform to UL STD 1642 | RoHS | Li-ion | CE

CURVES PROFILES

olenergies

SAFE
DURABLE
POWERFUL

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

ECO SCORE A

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

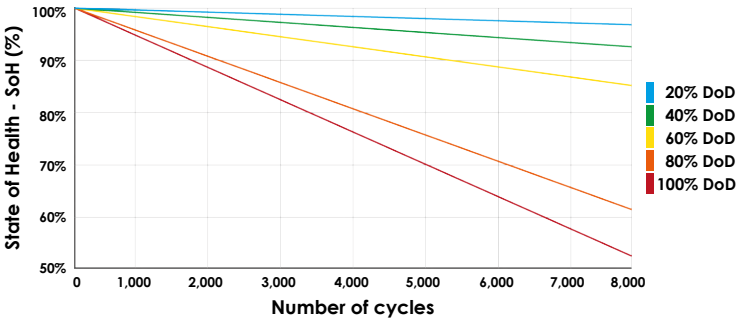
There is no need to follow a sequential curve.
Charging efficiency is close to 100%.

Extreme temperature resistant

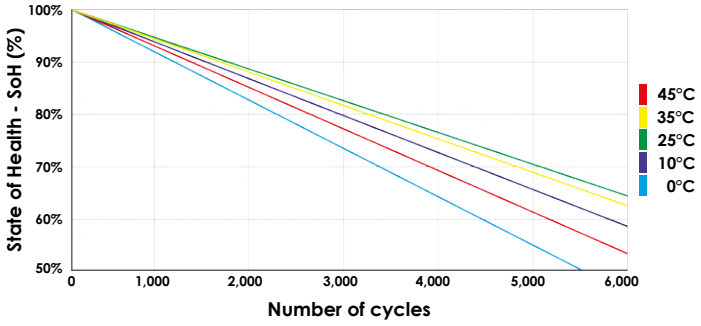
Olenergies systems are always the technological best choice for both hot and cold environments.

LIFETIME CURVES

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

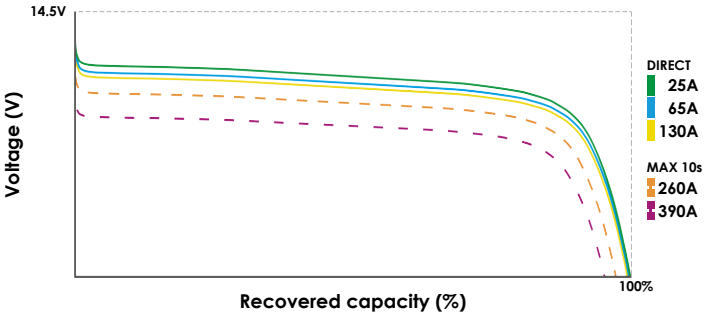


State of Health (SoH) related to the number of cycles for different temperatures @1C and 100% DoD

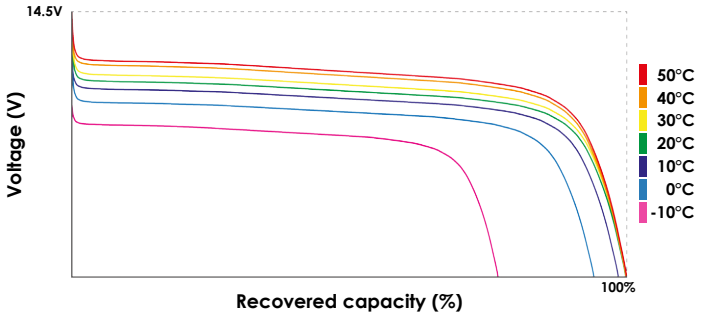


DISCHARGE CURVES

Voltage curves @25°C for various discharge currents

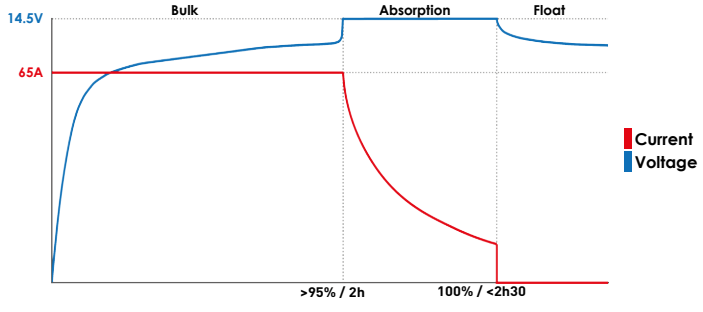


Voltage curves @C/5 for various temperatures



CHARGE CURVE

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



SELF-DISCHARGE CURVE

Self-discharge according to time and storage temperature