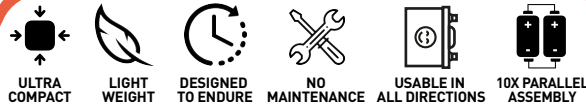




OlenBox series

LMax-LP

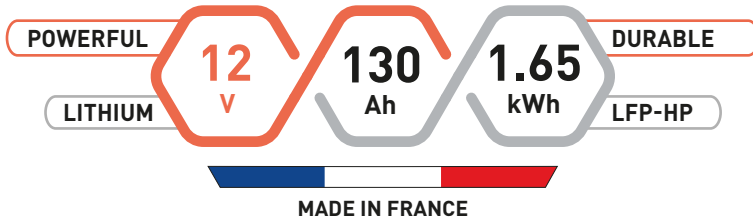


WARRANTY
2
YEARS

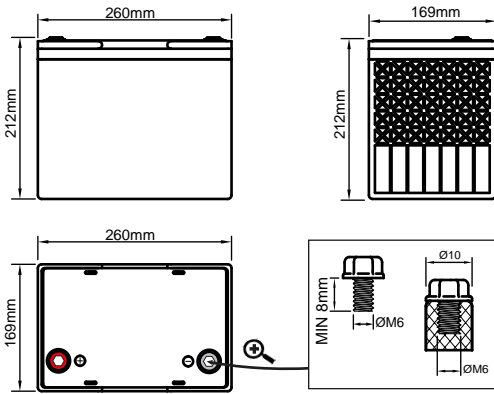
olenergies

THE LIGHT & COMPACT
SLOW DISCHARGE BATTERY

TECHNICAL SHEET



DIMENSIONS



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	12.00 kg
Internal resistance	< 7.0 mΩ	Terminals	M6
Monthly self discharge	< 3 %	Ingress protection code	IP65
Charge		Discharge	
Charge efficiency	> 99 %	Discharge efficiency	> 98%
Charge voltage	14.5 ± 0.1 V	Continuous current	20 A
Charge mode	CC/CV	Maximum current 10 sec.	60 A
Rated charge current	20.0 A	Discharge cut-off voltage	10.0 V
Charge cut-off current	0.05C	Configurable thresholds	No
Lead-acid chargers	Compatible	Exceeding values	No
Temperature		Quality	
Charge temperature	0°C +50°C	Certifications	CE, RoHS, UN38.3
Discharge temperature	-20°C +65°C	Warranty	2 years
Storage temperature	+15°C +35°C	Manufacturing country	France

MADE IN FRANCE INNOVATION

- ✓ High Performance Lithium LFP Technology
- ✓ Reliable energy source
- ✓ 60% lighter than a lead acid battery
- ✓ Designed to last 20 years
- ✓ Charge efficiency close to 100%
- ✓ Built-in safety mechanisms
- ✓ From 4,000 to 12,000 cycles (refer to curves)
- ✓ No « memory effect »

APPLICATIONS

- Lighting & Instrumentation**
Test & Measurement, Camera, Lighting, Energy case, Weather station, Pumping...
- Marine, mobility and robotics**
Boats, Recreational vehicles, Robots, Construction, Forklifts...
- Critical power supply**
UPS, Datacenter, Medical infrastructures...
- Solar storage**
Self-consumption, Renewable energies, Vehicle to grid, Grid services...

Cluster your batteries, add a screen and join the MERLIN IoT ecosystem!



Accessories sold separately



BMS
INSIDE



Lead acid
Plug-&-Play



Charge: 20A
0°C | +50°C



Discharge: 20A
-20°C | +65°C



Rated values
13V | 128Ah



Cells conform to
UL STD 1642



RoHS



Li-ion



Recycling symbol



CE

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 designed to last up to 20 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.



Replaces 2 lead-acid batteries

Olenergies LFP-HP batteries can be discharged at 100% of useful capacity (lead-acid = 50%) !



Charge efficiency close to 100%

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

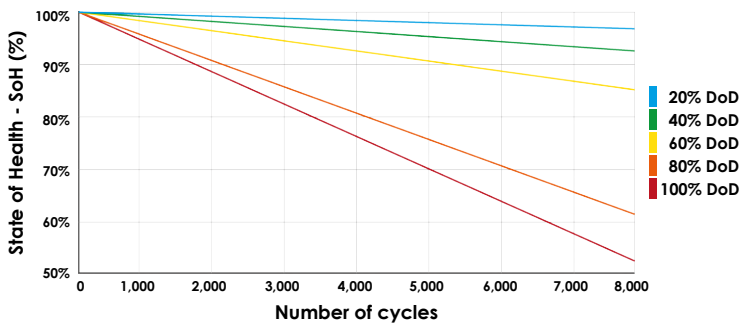


Equal voltage throughout the discharge

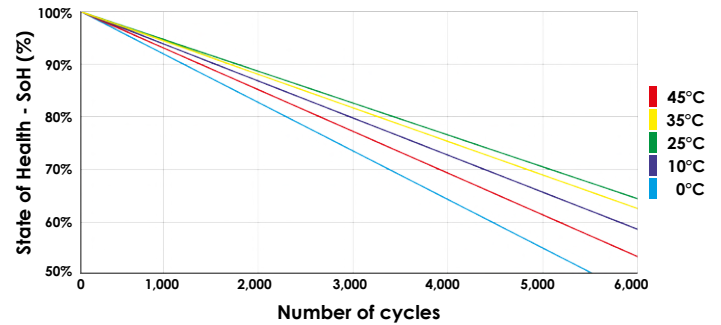
Unlike a lead-acid battery, our technology provide the same voltage levels throughout the discharge process.

LIFETIME CURVES

State of Health (SoH) related to the number of cycles for different Depths of Discharge (DoD) @C/5 and 25°C

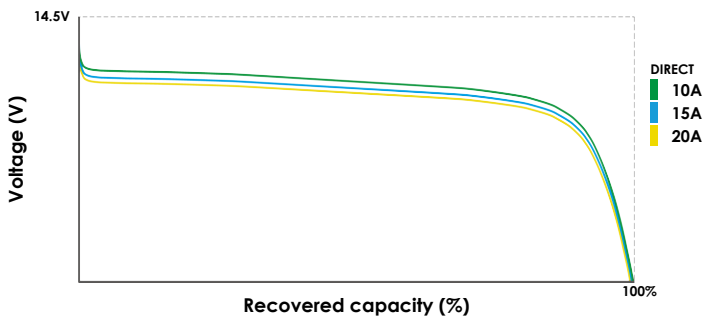


State of Health (SoH) related to the number of cycles for different temperatures @C/5 and 100% DoD

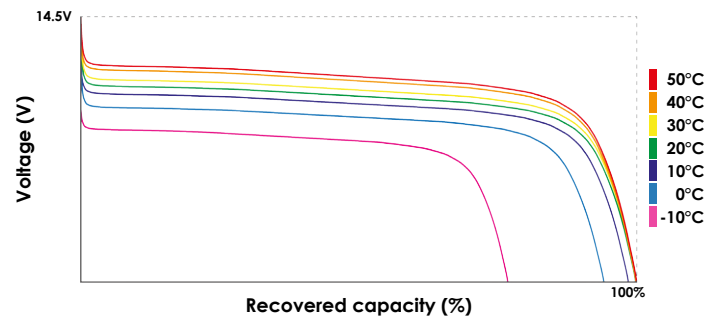


DISCHARGE CURVES

Voltage curves @25°C for various discharge currents

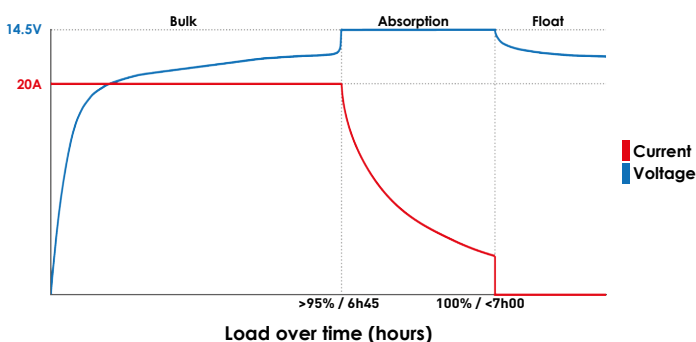


Voltage curves @C/5 for various temperatures



CHARGE CURVE

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



SELF-DISCHARGE CURVE

Self-discharge according to time and storage temperature

