



OlenBox series

XL-LP



ULTRA
COMPACT



LIGHT
WEIGHT



DESIGNED
TO ENDURE



NO
MAINTENANCE



USABLE IN
ALL DIRECTIONS



10X PARALLEL
ASSEMBLY

WARRANTY
2
YEARS

VERY HIGH AUTONOMY
WITH SLOW DISCHARGE

TECHNICAL SHEET

POWERFUL

12
V

LITHIUM

260
Ah

3.33
kWh

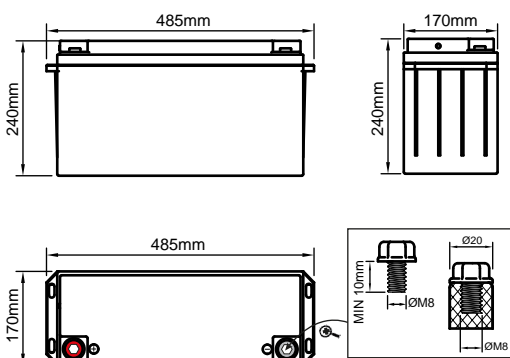
DURABLE

LFP-HP

MADE IN FRANCE



DIMENSIONS



SPECIFICATIONS

Electrical

Rated voltage	13.0 V
Rated capacity	256.0 Ah
Energy	3.33 kWh
Internal resistance	< 4.0 mΩ
Monthly self discharge	< 3 %

Mechanical

Casing material	ABS
Dimensions (W*D*H)	485*170*240 mm
Weight	27.00 kg
Terminals	M8
Ingress protection code	IP65

Charge

Charge efficiency	> 99%
Charge voltage	14.5 ± 0.1 V
Charge mode	CC/CV
Rated charge current	20.0 A
Charge cut-off current	0.05C
Lead-acid chargers	Compatible

Discharge

Discharge efficiency	> 98%
Continuous current	20 A
Maximum current 10 sec.	60 A
Discharge cut-off voltage	10.0 V
Configurable thresholds	No
Exceeding values	No

Temperature

Charge temperature	0°C +50°C
Discharge temperature	-20°C +65°C
Storage temperature	+15°C +35°C

Quality

Certifications	CE, RoHS, UN38.3
Warranty	2 years
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 »

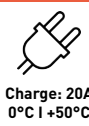
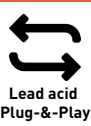
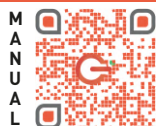
APPLICATIONS

- 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



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%.

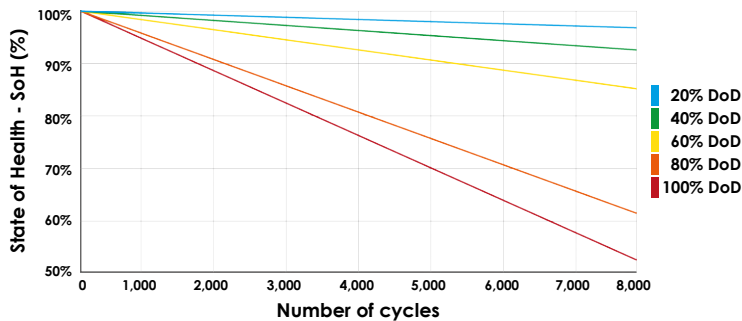


Equal voltage throughout the discharge

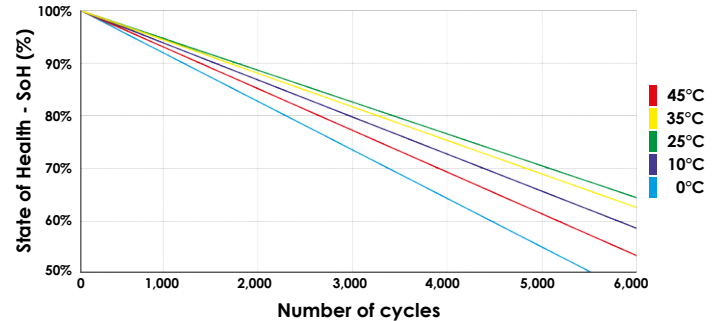
Unlike a lead-acid battery, our technology provide the same voltage levels throughout the discharge process.

LIFETIME CURVES

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

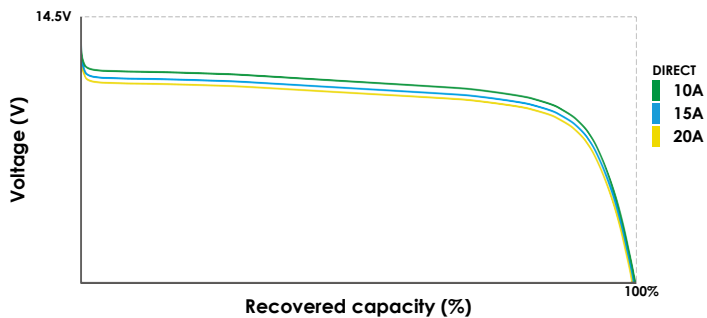


State of Health (SoH) related to the number of cycles for different temperatures @C/5 and 100% DoD

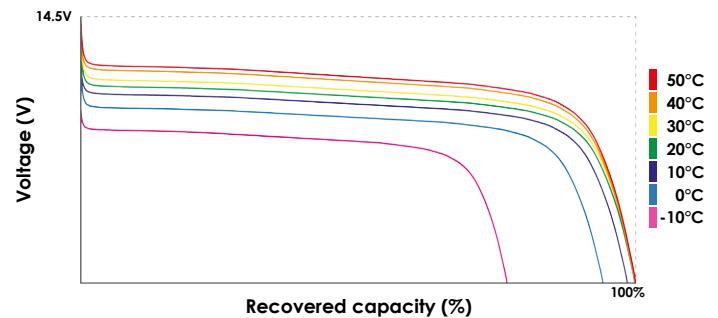


DISCHARGE CURVES

Voltage curves @25°C for various discharge currents

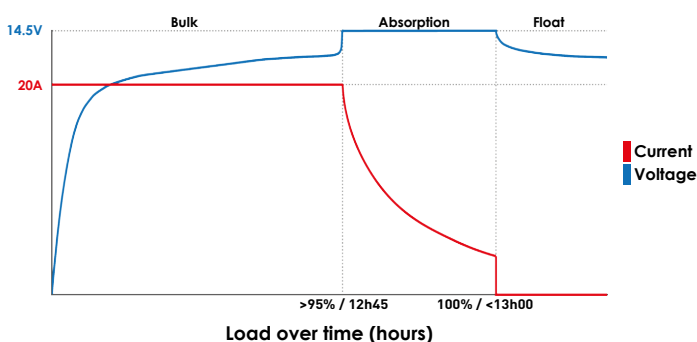


Voltage curves @C/5 for various temperatures



CHARGE CURVE

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



SELF-DISCHARGE CURVE

Self-discharge according to time and storage temperature

