



olenergies

OlenBox series

M



ULTRA COMPACT



LIGHT WEIGHT



DESIGNED TO ENDURE



NO MAINTENANCE



USABLE IN ALL DIRECTIONS



UNLIMITED ASSEMBLY

WARRANTY
5
YEARS

TECHNICAL SHEET

THE POWERFUL BATTERY
MADE TO LAST



POWERFUL

24
V

35
Ah

835
Wh

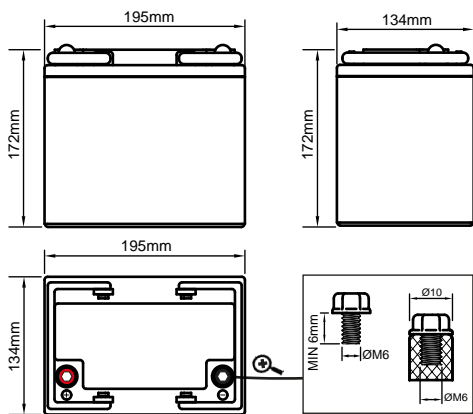
DURABLE

LITHIUM

LFP-HP

MADE IN FRANCE

DIMENSIONS



SPECIFICATIONS

Electrical

Rated voltage	26.0 V
Rated capacity	32.0 Ah
Energy	832 Wh
Internal resistance	< 53.0 mΩ
Monthly self discharge	< 3 %

Mechanical

Casing material	ABS
Dimensions (W*D*H)	195*134*172 mm
Weight	6.50 kg
Terminals	M6
Ingress protection code	IP65

Charge

Charge efficiency	> 98 % @0.2C
Charge voltage	29.0 ± 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	> 96% @0.5C
Continuous current	35 A
Maximum current 10 sec.	105 A
Discharge cut-off voltage	20.0 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	5 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
- ✓ Fast charge
- ✓ Built-in safety mechanisms
- ✓ From 4,000 to 12,000 cycles (refer to curves)
- ✓ Compatible with MERLIN Smartshunt!

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%.

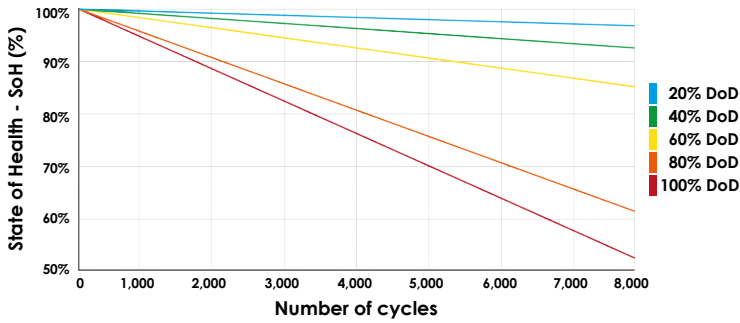


Equal voltage throughout the discharge

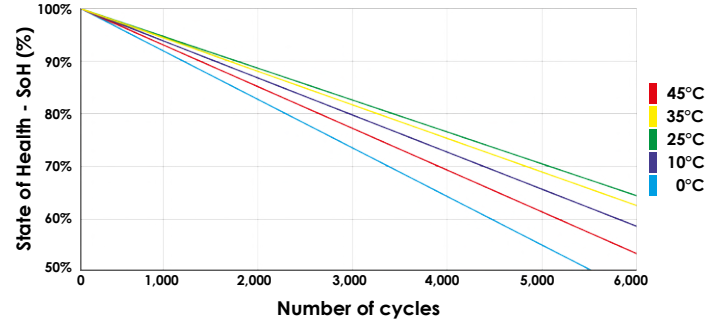
Unlike a lead-acid battery, our technology provide the same voltage levels throughout the discharge process.

LIFETIME CURVES

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

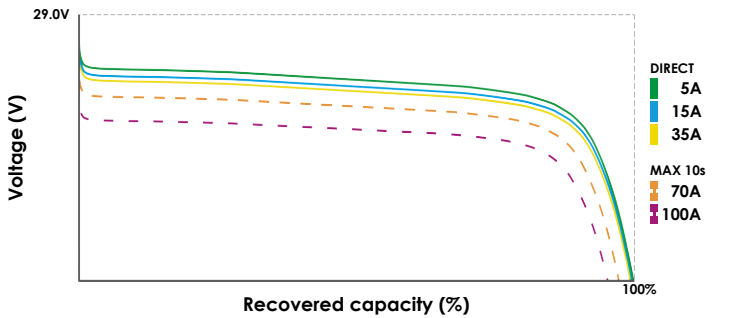


State of Health (SoH) related to the number of cycles for different temperatures @1C and 100% DoD

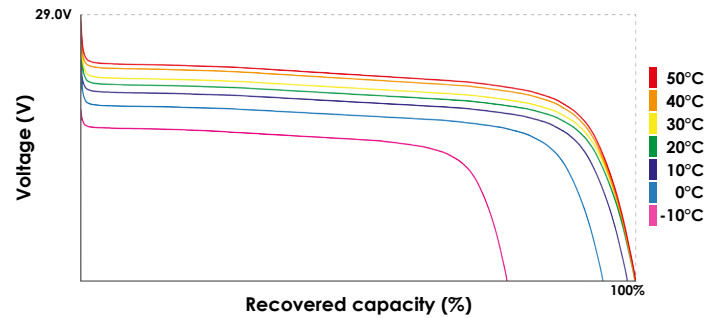


DISCHARGE CURVES

Voltage curves @25°C for various discharge currents

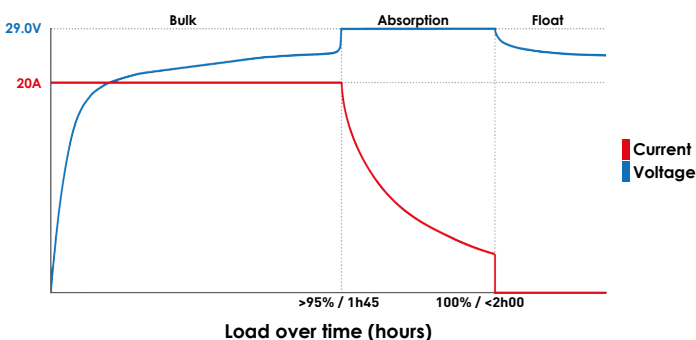


Voltage curves @C/5 for various temperatures



CHARGE CURVE

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



SELF-DISCHARGE CURVE

Self-discharge according to time and storage temperature

