

# OlenBox series















## TECHNICAL SHEET



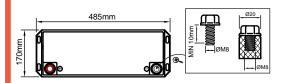
**MADE IN FRANCE** 



#### **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 \* Bluetooth









#### 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!





## 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





#### 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

#### **SPECIFICATIONS**

Electrical
Rated voltage
Rated capacity
Energy
Internal resistance
Monthly self discharge
Charac

13.0 V 256.0 Ah 3.33 kWh  $< 4.0 \,\mathrm{m}\Omega$ < 3 %

Mechanical Casing material Dimensions (W\*D\*H) Weight **Terminals** Ingress protection code

ABS 485\*170\*240 mm 28.00 kg

M8 IP65

#### Charge

Charae efficiency Charge voltage Charge mode Rated charge current Charge cut-off current Lead-acid chargers

> 98 % @0.2C 14.5 ± 0.1 V CC/CV 130.0 A 0.05C Compatible

Discharge Discharae efficiency Direct discharge current

Maximum current 10 sec. Minimum voltage Configurable thresholds Exceeding power

> 96% @0.5C 260 A ≼∑

780 A 🖏 🖏 10.0 V Yes On quotation

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







MERLIN is sold separately















13V | 256Ah















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



Golenereies\*



#### 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%.



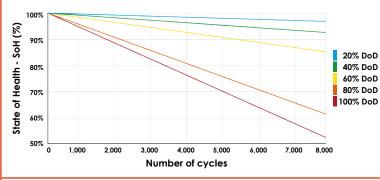
#### **Extreme temperature resistant**

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

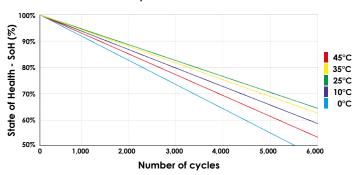


#### **LIFETIME CURVES**

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

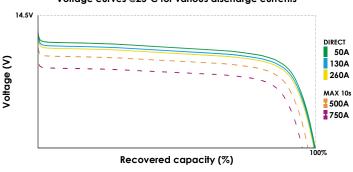


#### State of Health (SoH) related to the number of cycles for different temperatures @1C and 100% DoD

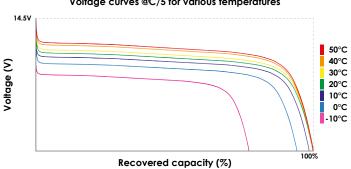


#### **DISCHARGE CURVES**

Voltage curves @25°C for various discharge currents

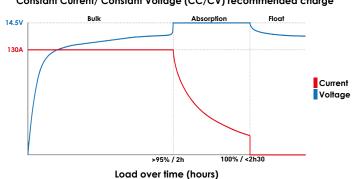


Voltage curves @C/5 for various temperatures



#### **CHARGE CURVE**

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



#### **SELF-DISCHARGE CURVE**

Self-discharge according to time and storage temperature

