

Datasheet for the model MB12550**MegaBox 12 V/ 550 Ah/ 7,04 kWh****Intended use**

- For caravans, **boats, cottages, residential**, and other **projects**
- For easy **replacement of original batteries** at the end of their service life in various systems
- For customers who require customization and **plug-and-play solutions**
- For optimal solutions using **modularity**

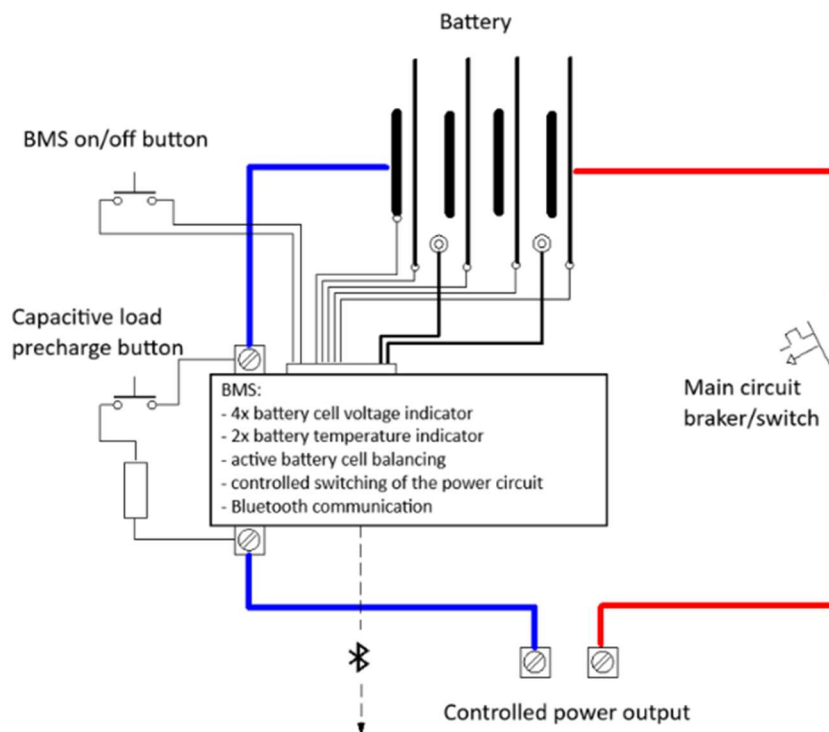
Product features

- **A structurally simple and flexible electrical energy storage system** assembled from battery cells connected in series with a total nominal capacity of **7.04 kW and standardized mechanical and electrical components**. The customer receives a solution with above-standard service life, usability, and future **variability**.
- The battery storage system features the safest lithium battery technology available and the best price/performance ratio of **LiFePO4 cells** in a safe **12 V** low-voltage module. The module consists of **4 cells**, each with a voltage of **3.2 V / 550 Ah**. Thanks to the careful selection of cells and BMS, maximum power and capacity are always available. Communication with the battery storage is provided via a mobile phone with a **Bluetooth connection**.
- The module consists of a **robust yet lightweight hardened aluminium construction** that is very easy to assemble. This ensures mechanical protection and dimensional stability of the cells thanks to compression. The module includes a mounting platform for electrical components.

- The modules can be **easily fixed to a movable platform or placed in a stationary installation with minimal space requirements**, thanks to their **stackability**. It is also possible to place them **side by side or scatter them** and connect them into a single system.
- Thanks to the **standardization, availability, and interchangeability of all module parts**, **reliable warranty and post-warranty service** is ensured.

Technical specifications

Parameter	Value	Note
Nominal voltage (V)	12.8	
Nominal capacity (Ah / kWh)	550 / 7.04	
Max. continuous charging current (A)	250	Recommended max. 165 A
Max. continuous discharging current (A)	250	Recommended max. 165 A
Operating temperature of the box (°C)	5 to 40	
Cyclic life	6000	60% DOD @0.3C/@0.3C, @25°C, >60% SOH
Turning off charging (V)	3.70	Reaching this value on any battery cell
Restarting charging (V)	3.50	Drop on a cell that has exceeded 3.70V
Turning off discharging (V)	2.70	Drop of any battery cell to this value
Restarting discharging (V)	3.00	Rise on a cell that has dropped to 2.70V
Overcurrent shutdown (A)	300	For charging and discharging, BMS delay 120 s, circuit breaker delay depends on the type of overload
Max. temperature – turning off charging / discharging (°C)	70 / 70	Restarting 60 / 60
Min. temperature – turning off charging (°C)	0	Restarting 5
BMS own consumption in operating mode (mA)	< 10	
BMS self-consumption when switched off (mA)	< 0.1	
BMS shutdown due to undervoltage (V)	20.00	
Balancing current	2 A	Active balancer
Main circuit breaker	250 A	Switch-off characteristics C
Dimensions of the assembled module l / w / h (mm)	675/185/355	Height, including lower and upper cap nuts M10
Total weight of the assembled module (kg)	54.0	Including electrical equipment
Weight of a single box (kg)	7.7	Including a mounting platform for electrical installation
Height of space above cell terminals (mm)	30	Approximate value, depends on the type of cells
Space for electrical components on the electrical platform l / w / h (mm)	670/185/60	

Electrical diagram – 12 V 550 Ah module**Note:**

! The built-in BMS cannot be reconfigured, only the battery status can be monitored !
The BMS with balancer is set to specific battery storage parameters. Any unprofessional intervention or change to the set parameters will result in loss of warranty.

Package contents

Fully assembled, tested battery storage is ready for immediate use.