



Advanced Lithium Battery Superieur 12 V | 140 Ah

1848 Wh | OCV 13,2 V | WhisperConnect | LiFePo4 Iron Phosphate Technology



Designed and engineered in Europe, by a team of specialists with over 35 years of experience in the field of off-grid power systems. Resulting in a sensational renewable energy source for any professional or recreational user. That is the new 140 Ah (1848 Wh) 13.2 VDC Advanced Lithium Battery Superieur. Engineered with advanced & safe LiFePO₄ (LFP) chemistry to ensure a constant power provision at any time and under any circumstance. Designed as an "energy block" to create larger 12 and 24 VDC systems. A-grade cylindrical cells are applied resulting in the highest possible energy density.

Optimized integration

The Advanced Lithium Battery Superieur includes an advanced, energy efficient, integrated BMS. The battery is waterproof (with additional raincover IP54 degree) and can be used (charging and discharging) at low ambient temperatures enabled by an internal heating element. The design contains a modern plug-and-play CAN communication, as standard the WhisperConnect CAN protocol is applied.

The multi connectable terminals secure professional cable connections for installations with voltage configurations (up to 8 Advanced Lithium Battery Superieur packs can be installed for series-parallel configurations, 2 units in series and 4 units in parallel)

Battery Monitoring & Heating Functionality

The Advanced Lithium Battery Superieur 13.2 V | 140 Ah features accurate integrated battery monitoring showing key parameters such as voltage, current, temperature, state of charge and "time remaining".

Information is aggregated to show the battery voltage level of a complete battery system (sum of the modules). Each battery is fitted with a clear LED indicator to show the actual status of the battery.

Parallel and serial connections

The Advanced Lithium Battery Superieur allows to configure 12 V and 24 V, systems the easy way. Optional installation parts are offered to ensure a secure installation of the battery on a surface.

- High quality Lithium (LFP) grade cylindrical cells
- Safe Lithium Iron Phosphate (LiFePO₄) technology
- Integrated short circuit protection
- Integrated solid-state switch with precharge function
- Integrated BMS (Battery Management System)
- Integrated cell heating possibility for subzero charging
- MOS switched cell balancing



Advanced Lithium Battery

Superieur 12 V | 140 Ah

Application Data

Advanced Lithium Battery Superieur 12 V | 140 Ah 40291215

Article Number

Electrical Parameters

| | |
|---------------------------|------------------------------|
| Nominal Voltage | 12.0 Vdc |
| Open Circuit Voltage | 13.2 Vdc |
| Typical Capacity | 140 Ah |
| Minimal Capacity | 135 Ah |
| Energy | 1848 Wh |
| Resistance | <5 mΩ |
| Efficiency | >99 % |
| Cycle Life | >3500 cycles at 1C, 80 % DoD |
| Cell Self-Discharge | <2 % per month |
| Cell Type (chemistry) | Cylindrical (LiFePo4) |
| Cells in Series/Parallel | 4S/30P |
| Max. module configuration | 2S/4P |

Discharge Parameters

| | |
|-------------------------------|------------------|
| Continuous Discharge Current | 120 A |
| Max. Discharge Current | 140 A |
| Pulse Discharge Current | 180 A (1 s) |
| Recommended Volt. Disconnect | 10.5 Vdc |
| BMS Discharge Cut-off Voltage | 9.2 Vdc |
| Short Circuit Protection | 200 μs to 600 μs |

Charge Parameters

| | |
|----------------------------|----------------------|
| Charge Method | CC-CV |
| Recommended Charge Voltage | 14.2 Vdc to 14.4 Vdc |
| Recommended Float Voltage | 13.8 Vdc |
| Recommended Charge Current | 40 A |
| Maximum Charge Current | 80 A |
| BMS Charge Cut-off Voltage | 14.6 Vdc |

Mechanical Parameters

| | |
|--------------------|--|
| Dimensions | 329 mm x 180 mm x 204 mm (12.95" x 7.09" x 8.03") |
| Weight | 16.55 kg (36.5 lbs) |
| Terminal Thread | 2x M 8 x 1.25 |
| Battery Housing | ABS Plastic Case |
| Housing Protection | IP21 With additional raincover IP54 |

Temperature Parameters

| | |
|-----------------------|-------------------------------|
| Discharge Temperature | -20°C to 60°C (-4°F to 140°F) |
| Charge Temperature | 0°C to 60°C (32°F to 140°F) |
| Storage Temperature | -20°C to 45°C (-4°F to 113°F) |

Compliance

| | |
|----------------|-------------------|
| Certifications | UL 1642 For Cells |
|----------------|-------------------|

- External communication interface: CAN bus WhisperConnect (2 ports for easy daisy chaining)
- User signal interface for optional 3 connections
- Optical LED indicators and DIP switches on every battery
- Historical storage of events and data
- Sleep mode for low power consumption
- Configurable DIP switch settings for multiple systems, for monitoring on OctoView 3

Accessories:



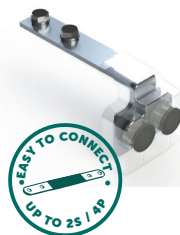
OctoView 3



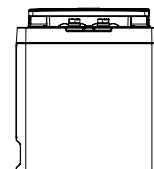
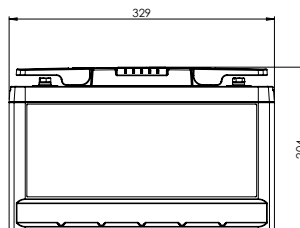
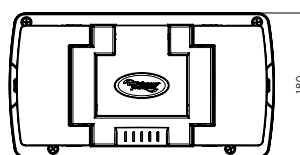
OctoControl Gateway



Battery Pack Installation Kit



Dimensions



Different assembly options:

