

Datasheet

LION Smart Mobility Power 53



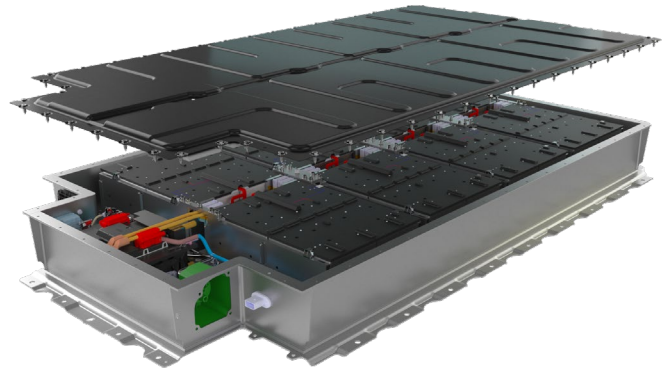
E-Bus



E-Truck



E-Off Highway



Features

Availability

- Samples available

Backward compatible

- Same interfaces and form factor as LION Smart Mobility 42 (SE09)

High peak power

- High peak power capability
- Fast charging compatibility

Customizable setup

- Connectivity up to 12 batteries via gateway up to 634 kWh
- Ideal for 400V and 800V architecture

High quality components

- NMC battery cells
- High quality electronic components and algorithms

Easy integration

- Contact protection on pack level
- Standardized interfaces & customized software

Designed for critical mobility applications

- Safety certified Battery Management Systems (BMS)
- Robust passive safety structure



The Future Of Battery Technology

LION Smart

Preliminary, subject to change
without notice

Standards Compliance

- ECE R100 Battery safety
- ECE R10 EMC
- UN 38.3 Transport Safety
- ISO 16750 Environmental conditions
- Functional safety
 - ISO 26262 ASIL C
- Fully compliant for a wide range of mobility applications and use cases

Applicable Conditions

- Optimized shipping quantity:
 - Europe: 42 batteries in wooden box
 - Overseas: 48 batteries in wooden box

Contact Info

sales@lionsmart.com

| Parameter | Unit | Value |
|---|------|---------------------------------|
| Configuration (Modules x Cells) | | 96s1p (8 x 12) |
| Battery Cell Chemistry | | NMC |
| Charging end point (operation) | V | 417.6 |
| Nominal Voltage (DC) | V | 359.0 |
| Discharge end point (operation) | V | 268.8 |
| Nominal Capacity | Ah | 147 |
| Energy Content (nominal) | kWh | 52.8 |
| End of Life (State of Health)* | % | 70 |
| Cycle Life (@25°C ambient, 1C/1C & 100% DoD) | # | >2,500 |
| Cycle Life (@25°C ambient, 1C/1C & 80% DoD) | # | >3,000 |
| Max. Discharge Power (5s, 90 % SoC, 25 °C) | kW | 180 |
| Cont. Discharge Power (1200 s, 90 % SoC, 25 °C) | kW | 76 |
| Max. Charge Power (3s, 50% SoC, 25 °C) | kW | 120 |
| Cont. Charge Power (25 °C, until CV charging step, for one cycle, cooling required) | kW | 63 |
| Protection class (IP class) | | IP67, IP6K9K |
| Dimensions (L x W x H) Housing | mm | 1,662 x 964 x 174 |
| Total Weight (depending on variant) | kg | approx. 280 |
| Humidity Range (during storage) | % | 0-90 (no condensation) |
| Heating | | 1kW electrical heating included |
| Cooling | | Refrigerant R1234yf; R134a |

*Further use beyond this point is not recommended for safety reasons.



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