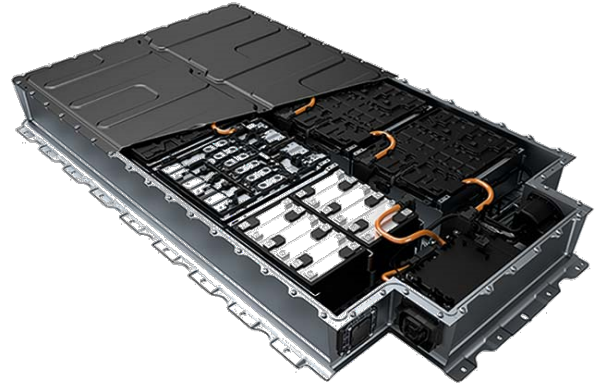


Datasheet

LION Smart Mobility Power 42



E-Bus



E-Truck



E-Off Highway

Features

Availability

- Off-the-shelf available

High peak power

- High peak power capability
- Fast charging compatibility

Customizable setup

- Connectivity up to 12 batteries via gateway up to 506 kWh
- Ideal for 400V & 800V architecture

Field proven technology

- Based on automotive BMW i3 battery
- Over 1 Bn. km driven p.a.

High quality components

- Samsung SDI battery cells (NMC)
- High quality electronic components
- Proven long lifetime
- Manufactured in Germany

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

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

- Ordering Code: 1001485-01
- Optimized shipping quantity:
 - Europe: 42 batteries in wooden box or 54 in returnable rig
 - 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	403.2
Nominal Voltage (DC)	V	352.3
Discharge end point (operation)	V	259.2
Nominal Capacity	Ah	120
Energy Content (nominal)	kWh	42.2
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	148
Cont. Discharge Power (1200 s, 90 % SoC, 25 °C)	kW	53
Max. Charge Power (3s, 50% SoC, 25 °C)	kW	80
Cont. Charge Power (25 °C, until CV charging step, for one cycle, cooling required)	kW	50
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. 276
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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