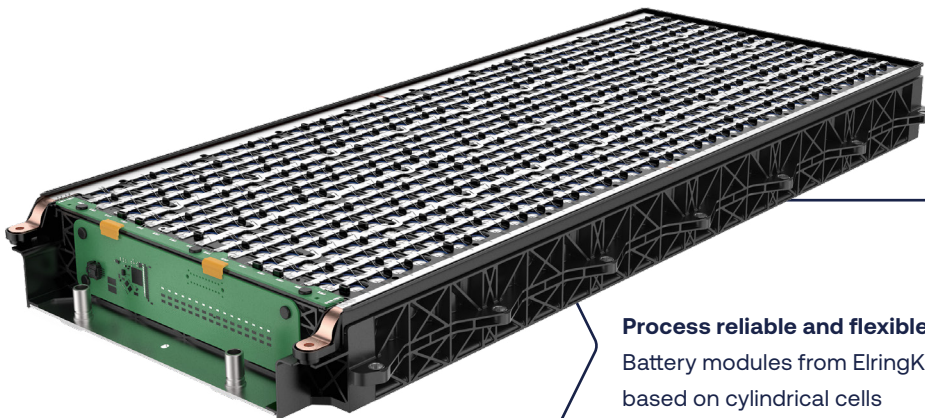


FACT SHEET

120 V Battery module



Process reliable and flexible
Battery modules from ElringKlinger
based on cylindrical cells

The cylindrical lithium-ion battery module from ElringKlinger represents a powerful 120 V standard solution for traction batteries.

It can be connected in series to achieve a system voltage of up to 500 V. Additionally, the module can be adjusted to meet individual customer requirements.

Technology

- » Module assembly of the 21700-cell format
- » Assembly of components with production ready technology
- » IsoSPI communication
- » Integrated voltage and temperature measurement via isoSPI
- » Integrated passive cell balancing via isoSPI
- » Wire bonding (single cell fuse)
- » Hot spot redundance cell temperature measurement
- » Module mounting (stackable, underbody mounting)
- » Plastic module frame
- » Active cooling integrated

Parameters

- » 120 V standard module comprised of 576 cylindrical lithium-ion cells (21700)
- » Connection in series possible up to an integrated system voltage of 500 V
- » Depiction of various module voltage levels (48 V, 60 V and 120 V)
- » High module part variation (optional without integrated cooling, cell contacting system 48 V, 60 V or 120 V, cover optional)

Benefits

- » Maximum reliability due to function integration
- » High energy density
- » Flexible module variants

Specifications

36s16p BATTERY MODULE

| | |
|--|--|
| CELL TECHNOLOGY | Lithium-ion (NMC) |
| CELL TYPE | 21700 cylindrical cells |
| MODULE SET UP | 36s 16p |
| DIMENSIONS (MM) | 886 x 407 x 81 |
| WEIGHT (KG) | 50.6 |
| MECHANICAL INTERFACE | 14 x M6 |
| NOMINAL VOLTAGE MODULE / SYSTEM (V) | 132.8 / up to 500 |
| NOMINAL CAPACITY (AH) | 79.2 |
| NOMINAL ENERGY (KWH) | 10.5 |
| NOMINAL SPECIFIC ENERGY (WH/L) | 358 |
| NOMINAL GRAVIMETRIC ENERGY (WH/KG) | 207.5 |
| MAX. CONTINUOUS CHARGE (A / C-RATE / KW) | 55 / 0.7 / 7.3 |
| MAX. CONTINUOUS DISCHARGE (A / C-RATE / KW) | 86 / 1.1 / 11.4 |
| MAX. PULSE DISCHARGE CURRENT (10S) (A / C-RATE / KW) | 269 / 3.4 / 35.7 |
| OPERATING TEMPERATURE (°C) | Operating temperature cells: -20 to +55 |
| THERMAL MANAGEMENT | Cooling plate (water/glycol) |
| THERMAL INTERFACE | Quick connector Ø14 |
| COMMUNICATION INTERFACE | IsoSPI interface |
| ELECTRICAL INTERFACE | M6 (DC +/-) |
| SAFETY FEATURES | Temperature Sensor + Bond wire fuse |
| LIFE-TIME (UNTIL 80% CAPACITY) | > 1,000 cycles / depending on operating Strategy & DoD |
| CONFORMITY | UN 38.3 |

**ELRINGKLINGER – YOUR PARTNER
FOR E-MOBILITY SOLUTIONS WITH
BATTERY TECHNOLOGY**

Cell Expertise – Module and System Design – Installation Space Optimization –
Simulation and Testing – Certification – Prototyping – Process Engineering –
Industrialization – Integrated Solutions and Components – Recycling

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▶ **SHAPE**³⁰

The strategic direction of
the ElringKlinger Group

