

# ESS Cell 1175 Ah

Prismatic LFP cell for long-duration energy storage



Preliminary

## Prismatic LFP cell with high cyclic lifetime, low temperature rise and reliable safety characteristics.

Specially optimised for use in stationary energy storage systems with the highest requirements on safety, reliability and performance. Suitable e.g. for industrial, utility, and grid serving applications.

- Product certifications\*: IEC 62619, UL 9540A, UL 1973, UN 38.3
- Company certifications: ISO 9001, ISO 14001, ISO 45001, SA 8000
- Environmental compliance\*: RoHS, REACH, Regulation (EU) 2023/1542, Cobalt free

## Low LCOS (Levelised Cost of Storage)

- High cyclic lifetime  $\geq 11,000$  cycles, thanks to advanced material and process technologies
- Designed for Long Duration Energy Storage (LDES) systems

## Low Temperature Rise

- Temperature rise  $\leq 5^{\circ}\text{C}$ , thanks to chemical materials and structural design improvement

## Reliable Safety

- HiTHIUM-developed prismatic LFP cell with high thermal stability
- No fire or explosion during nail penetration and crush tests
- Ultra wide operating temperature range

# ESS Cell 1175 Ah

Prismatic LFP cell optimised for use in stationary ESS



| GENERAL          |                           |
|------------------|---------------------------|
| Nominal Capacity | 1175 Ah <sup>1,2</sup>    |
| Nominal Energy   | 3,760 Wh <sup>1,2</sup>   |
| Cell Chemistry   | LiFePO <sub>4</sub> (LFP) |
| Nominal Cycles   | ≥ 11,000 <sup>1,2,3</sup> |
| Gravimetric ED   | ≥ 180 Wh/kg               |
| Volumetric ED    | ≥ 400 Wh/L                |
| Cell Model       | MC1175P025A               |

| ELECTRICAL                               |  |
|--|--|
| Nominal Voltage                          | 3.2 V <sup>1,2</sup>                               |
| Operating Voltage                        | T > 0°C 2.50 ... 3.65 V<br>T ≤ 0°C 2.00 ... 3.65 V |
| AC Resistance (1 kHz)                    | 0.23 mΩ +/- 0.05 <sup>4</sup>                      |
| Max Self-discharge Rate                  | 3% / month <sup>2,4</sup>                          |
| Nominal Continuous Charge/discharge Rate | 0.25P/0.25P  |

<sup>1</sup> 0.25 P / 0.25 P

<sup>2</sup> 25°C +/- 2.0

<sup>3</sup> 70 % SOH

<sup>4</sup> 27 % SOC

\* The certifications are in-progress.

| MECHANICAL             |                   |
|------------------------|-------------------|
| Dimensions (L x W x H) | 580 x 75 x 216 mm |
| Type                   | Prismatic         |
| Weight                 | 20.4 kg +/- 0.5   |
| Volume                 | 9.4 L             |

| TEMPERATURE RANGE     |                |
|-----------------------|----------------|
| Charging              | 0°C ... 60°C   |
| Discharging           | -30°C ... 60°C |
| Storing (Recommended) | -20°C ... 35°C |

| PRODUCT CERTIFICATIONS* |                              |
|-------------------------|------------------------------|
| Safety Certificates     | IEC 62619, UL 9540A, UL 1973 |
| Transportation          | UN 38.3                      |

| ENVIRONMENTAL*  |                          |
|-----------------|--------------------------|
| Compliance      | RoHS, REACH, Cobalt free |
| Regulation (EU) | 2023/1542                |

| COMPANY CERTIFICATIONS |  |
|------------------------|--|
|                        | ISO 9001, ISO 14001,<br>ISO 45001, SA 8000 |

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