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LION Smart Storage 420 | 04/2025

Datasheet **LION Smart Storage 420**



Liquid-cooled Battery Energy Storage System

The liquid-cooled energy storage cabinet for commercial and industrial applications is a pure outdoor product that uses **innovative liquid cooling technology** and integrates LFP battery system, liquid-cooling system and fire protection system.

A single system is composed of **8 battery modules** connected in series.

Suitable for scenarios:

- Peak shaving
- Frequency regulation auxiliary services
- Valley filling on the user side
- Distributed power stations
- Large ground power stations



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Standards Compliance

- GB/T 36276
- GB/T 34131

Contact Info

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LEAPENERGY

| Parameter | Unit | Value |
|------------------------------------|--|---|
| DC side of battery | | |
| Cell capacity | Ah | 314 |
| Rated capacity | kWh | 418 |
| Charging & discharging power | kW | ≤208 |
| Serial parallel method | 1P416S | |
| Rated voltage | V | 1331.2 |
| Working voltage range | V | 1164.8 ~ 1407.6 |
| Rated charging & discharging ratio | ≤0.5P | |
| Over voltage protection | yes | |
| Over current protection | yes | |
| Short circuit protection | yes | |
| Over temperature protection | yes | |
| System efficiency | % | ≥92 |
| Weight | t | ≤3.4 |
| Working temperature | °C | Charging temperature 0~45°C & discharging 20~55°C |
| Working humidity range | % | 5 ~ 95 |
| Noise | dB | ≤75 |
| Protection grade | IP54 (battery compartment IP65) | |
| Firefighting method | Cabinet level (aerosol) + PACK level (Perfluorohexane) | |
| Communication Interface | RS485 + 4G + LAN | |



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