Multi-Layer Protection Ensuring GoodWe Battery Safety

Safety is at the core of GoodWe's battery design, ensuring reliable and secure energy storage for every application. By incorporating advanced technologies and rigorous safety mechanisms, GoodWe batteries provide comprehensive protection for both users and the system. Below are the key safety features that highlight our commitment to delivering safe and dependable energy solutions.

1. Overpressure Valve for Maximum Safety

The GoodWe Lynx D battery features a uniquely engineered over-pressure valve. When the internal temperature or pressure reaches abnormal levels, the valve activates automatically to release the excess pressure, preventing the risk of explosions or fires caused by buildup.

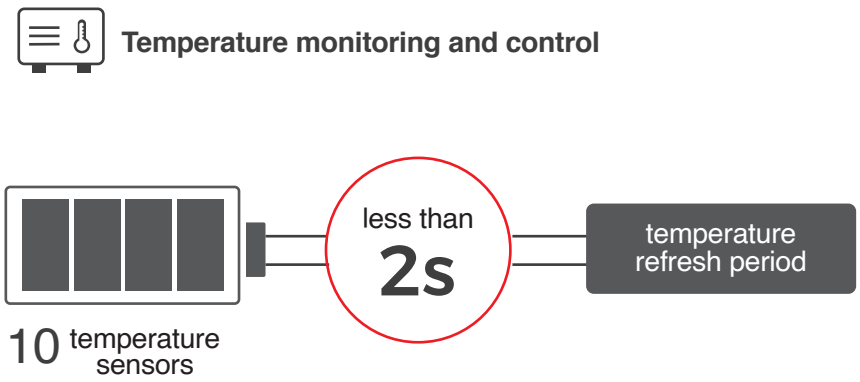
This design enhances the battery's safety, offering reliable performance and peace of mind to users, even in challenging or unforeseen situations.

2. Excellent Thermal Insulation Material

The GoodWe Lynx D battery uses thermal insulation foam, a high-performance thermal insulation material. This foam offers excellent thermal insulation properties, effectively reducing heat transfer during the battery's charge and discharge cycles. It helps maintain a stable operating temperature, ensuring the battery operates within the optimal temperature range and extending its lifespan. In addition to thermal insulation, high-density foam also absorbs vibrations and impacts, protecting the internal structure of the battery from external physical forces. More importantly, the thermal insulation foam is recyclable, non-toxic, and environmentally friendly.

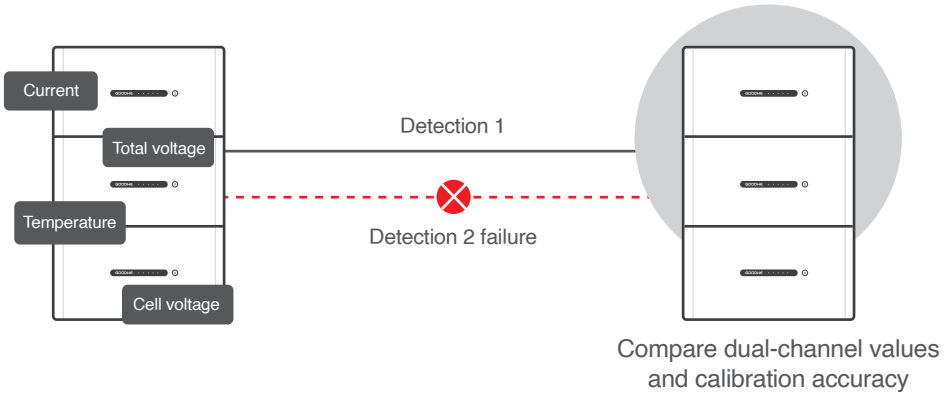
3. Comprehensive Temperature Monitoring of the Battery

GoodWe has implemented a comprehensive temperature monitoring and control system at the battery cell level. This system includes 10 temperature sensors strategically placed at different locations to continuously monitor the temperature of the cells, ensuring they remain within safe limits at all times. If the battery temperature becomes too high, the system immediately takes action to lower it, such as activating the built-in fan, to prevent damage or fire. This not only extends the battery's lifespan but also provides an additional layer of safety.



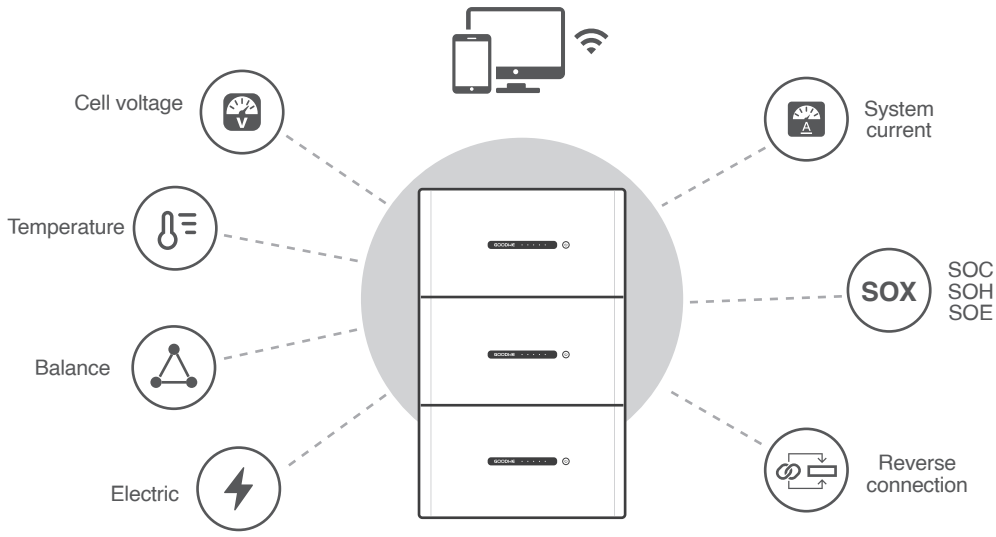
4. Abnormal Current Detection

GoodWe battery products undergo in-factory pre-testing to ensure the proper functioning of key circuits. If an electrical component malfunctions and poses a potential safety hazard, The BMS will disconnect the internal power supply to ensure the safety of both the battery and personnel, thereby eliminating risks at their source.



5. Excellent BMS Control System

GoodWe relies on an advanced Battery Management System (BMS) to monitor the battery's charging status, voltage, current, and temperature. When the battery reaches the safe charging limit, the system cuts off the power supply or reduces the charging speed. This is currently the most reliable overcharge prevention solution, offering real-time dynamic adjustments.



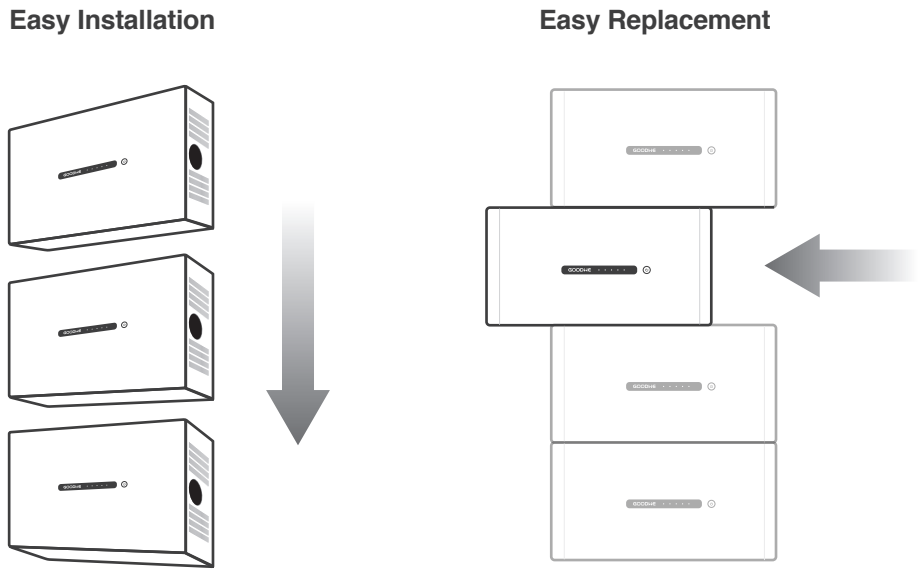
6. Safe LiFePO4 Technology

GoodWe adopts LiFePO4 technology, one of the safest battery technologies available today. LiFePO4 (lithium iron phosphate) batteries feature excellent thermal stability, making them more resistant to overheating and reducing the risk of fires compared to traditional lithium-ion batteries. This technology provides added protection, making GoodWe's home batteries the safe choice for residential applications.

7. System Design and Installation Safety

The GoodWe Lynx D battery supports a mix of old and new versions, allowing customers to expand their systems at any time in the future. When one of the modules fails, it can simply be replaced with a new one without having to replace the entire system. In addition, the battery stacks by using connectors for plug-and-play at the ports, making field installation of each package very simple.

The above solution avoids safety risks caused by aging, damage, increased contact resistance of external wires, and the risk of short circuits during wiring installation.



8. Forward and Reverse Connection Detection

Polarity reversal, where the positive and negative terminals are mistakenly swapped, can lead to rapid temperature increases, overheating, and serious risks such as internal damage, electrolyte leakage, or even explosions. To prevent such hazards, GoodWe batteries connected in parallel are equipped with an automatic polarity detection feature. If a reversal is detected, the system promptly reports a fault and halts operation, safeguarding installers and preventing accidents. This functionality not only protects the battery's internal structure but also preserves its performance and longevity.