



# PRODUCT DATASHEET

## LV 5 BATTERY Lithium Iron



### Typical Applications

- **On-Grid Systems** - The system efficiently integrates with the electrical grid, enabling energy storage and optimized consumption. It helps reduce reliance on grid power, balancing energy use by storing surplus energy produced during peak production times and releasing it when needed.
- **On-Grid + Backup** - This configuration combines grid connection with backup power capabilities. It provides a reliable power source during outages by drawing on stored energy, ensuring continuity in operations for homes or businesses without interruptions when grid power fails.
- **Off-Grid Systems** - Ideal for locations without access to the public grid, this system operates independently, storing energy from renewable sources like solar or wind. It ensures energy security for remote areas or in emergency scenarios, providing a self-sustained power supply.
- **Renewable Energy Integration** - The system is compatible with solar power setups, allowing for efficient energy storage. It stores excess energy generated by solar panels during the day, making it available for use at night or during periods of low solar generation, enhancing the renewable energy system's effectiveness.
- **Commercial and Residential Use** - Whether in residential homes or commercial establishments, this system offers a flexible energy solution. It optimizes energy use, reduces electricity costs, and provides a reliable backup during grid outages, offering a comprehensive energy management solution for diverse environments.

### Key Features

- **Safety** - The system uses lithium iron phosphate (LFP) cells, a highly stable and safe battery chemistry. These cells are developed in-house, ensuring they meet rigorous safety standards. LFP cells have a proven track record in millions of electric vehicles, offering reliable performance and minimizing the risk of thermal runaway.
- **Reliability** - With over two decades of expertise in LFP technology, the system has proven reliability. More than 1 million installations across 100+ countries demonstrate the technology's robustness and ability to handle real-world conditions, providing peace of mind to users around the world.
- **High Usable Capacity** -The system offers 100% usable capacity, meaning all the stored energy can be accessed and utilized. Unlike other batteries that may limit available energy, this system ensures no waste and maximizes efficiency, offering a full return on the energy stored in the system.
- **Intelligent Management** - Featuring advanced remote monitoring and analysis, the system allows users to track performance and diagnose issues from anywhere.
- **Scalability** - The system is designed for scalability, supporting up to 32 units in parallel to reach a massive storage capacity of up to 160 kWh. This ensures it can be expanded as energy needs grow, whether for larger commercial applications or expanding residential setups.
- **High Efficiency** - With a round-trip efficiency of  $\geq 95\%$ , the system ensures that most of the stored energy can be retrieved and used when needed. This high efficiency minimizes energy losses during charging and discharging, making it an economically and environmentally advantageous solution.

### Compatible Inverters :



### Technical Data

Usable Energy	Max. Charge and Discharge Current	Peak Charge and Discharge Current	Dimensions (H/W/D)	Weight	Nominal Voltage	Operating Voltage	Charge Cut-Off Voltage	Discharge Cut-Off Voltage	Scalability	Installation Mode	Communication	Round-trip Efficiency	Applications	Operating Temperature	Protection Class	Storage Humidity	Altitude
5 kWh	70 A	200 A, 10 s	195 x 595 x 255 mm	42 kg	51.2 V	40 - 57.6 V	57.6 V	40 V	Max. 32 in Parallel (160 kWh)	Floor Stand	CAN / RS485 / Bluetooth / Wi-Fi	$\geq 95\%$	On Grid / On Grid + Backup / Off Grid	Charge 0~50°C & Discharge -20~50°C	IP20	5%~95%	< 4000 m