# Lithium Battery System

## Key Features

### Reliable
- Long cycle life, up to 4000 times @50%DOD.
- Lithium iron phosphate high stability cell, thermal runaway no fire.
- Three-layer BMS management system ensures the reliability of lithium batteries.
- Flexible selection of cabinet fire protection, accurate and fast fire extinguishing, non diffusion.

### Efficient
- High energy density, compared with lead acid to save 70% floor space.
- Intelligent battery management system, saving daily operation and maintenance costs.

### Simple
- Simple expansion, standardized and modular design for lithium battery system. Each cabinet as independent battery group. The capacity can be expanded based on the backup time requirements.
- Simple maintenance, lithium battery module hot-plug maintenance, support multi-cluster parallel, and online uninterrupted maintenance.

## Project Specifications

### System Specifications

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
<td>±256V 100Ah ±256V 50Ah</td>
</tr>
<tr>
<td>Battery core material</td>
<td>Lithium iron phosphate (LFP)</td>
</tr>
<tr>
<td>Battery module</td>
<td>Specifications</td>
</tr>
<tr>
<td>parameters</td>
<td>Specifications</td>
</tr>
<tr>
<td></td>
<td>Voltage range</td>
</tr>
<tr>
<td></td>
<td>5.12kWh, 51.2VDC</td>
</tr>
<tr>
<td></td>
<td>40VDC ~ 58.4VDC</td>
</tr>
<tr>
<td></td>
<td>483<em>600</em>154</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td>About 57kg</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>512V DC (±256V DC)</td>
</tr>
<tr>
<td>Rated charging voltage</td>
<td>544V DC</td>
</tr>
<tr>
<td>Maximum charge/discharge current</td>
<td>1C @100A / 4C @400A</td>
</tr>
<tr>
<td>Life of cycle</td>
<td>4000 times @80%DOD, 0.5C, 25°C</td>
</tr>
<tr>
<td>Nominal power energy</td>
<td>51.2kWh</td>
</tr>
<tr>
<td>Weight</td>
<td>About 808kg</td>
</tr>
<tr>
<td>Size (W<em>D</em>H)mm</td>
<td>600<em>1200</em>2000mm</td>
</tr>
<tr>
<td>Self-discharge</td>
<td>&lt; 2% per month</td>
</tr>
<tr>
<td>Communication interface</td>
<td>CAN, RS485, Dry contact, SNMP (Optional)</td>
</tr>
<tr>
<td>Protection function</td>
<td>High/Low voltage, High/Low temperature, Over current, Short circuit</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-25°C ~ 60°C</td>
</tr>
<tr>
<td>Working temperature</td>
<td>0°C ~ 45°C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>&lt; 90%</td>
</tr>
</tbody>
</table>