



HR5120 Series HV C&I Energy Storage Battery

Convenient: integrated with standard 19" rack, make the installation and maintenance quick and easy.

Safe and Reliable: low self-discharge rate, up to half year shelf life, LFP material ensure the safety and long cycle life.

Intelligent BMS: it has protection functions including over-discharge, over-charge, over-current and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.

Eco-friendly: the whole module is non-toxic, non-polluting and environmentally friendly.

Flexible Configuration: batteries can be parallel or series connected to increase the capacity and power.

Wide Temperature: working temperature range is from -20 ~ 55°C, with excellent discharge performance and cycle life.

Rapic Charge/Discharge: up to 1C charge and discharge ability.

[HR5120]

Technical Parameters

| | | | | | | |
|---------------------------------------|---|-------------|-------------|-------------|-------------|-------------|
| Series | HR5120 | | | | | |
| Battery Cell Chemistry | Lithium Iron Phosphate (LiFePO ₄ or LFP) | | | | | |
| Module Nominal Voltage (V) | 102.4 | | | | | |
| Module Rated Capacity (Ah) | 50 | | | | | |
| Module Energy (kWh) | 5.12 | | | | | |
| System Model | HR5120-1 | HR5120-2 | HR5120-3 | HR5120-4 | HR5120-5 | HR5120-6 |
| Battery Module Qty In Series | 1 | 2 | 3 | 4 | 5 | 6 |
| System Nominal Voltage (V) | 102.4 | 204.8 | 307.2 | 409.6 | 512 | 614.4 |
| System Energy (kWh) | 5.12 | 10.24 | 15.36 | 20.48 | 25.6 | 30.72 |
| System Operating Voltage (V) | 89.6~115.2 | 179.2~230.4 | 268.8~345.6 | 358.4~460.8 | 448.0~576.0 | 537.6~691.2 |
| Rated DC Power (kW) | 5.12 | 10.24 | 15.36 | 20.48 | 25.6 | 30.72 |
| Standard Charge/Discharge Current (A) | 25 | | | | | |
| Max. Charge/Discharge Current (A) | 50 | | | | | |
| Peak Charge/Discharge Current (A) | 30/60@60s | | | | | |
| Cycle Life | ≥6000 @ 0.5C 80%DOD | | | | | |
| Design Life | 20 years | | | | | |
| Scalability | Max 6P | | | | | |

▾ Mechanical Specifications

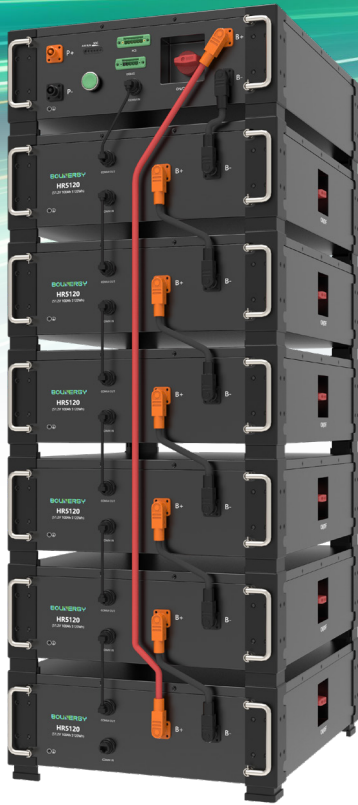
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|-----------------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Dimension (mm) | 440*540*340 | 440*540*510 | 440*540*680 | 440*540*850 | 440*540*1020 | 440*540*1190 |
| Weight (Approx. ±2kg) | 67 | 114 | 162 | 209 | 257 | 305 |
| Communication | RS485, CAN | | | | | |
| Ingress Rating | IP 54 | | | | | |
| Safety Standards | UN38.3, CE | | | | | |
| Installation | Rack mount | | | | | |

▾ Environmental Specifications

| | |
|--------------------------------------|----------|
| Storage Temperature (°C) | -20 ~ 55 |
| Operating Temperature Charge (°C) | 0 ~ 55 |
| Operating Temperature Discharge (°C) | -20 ~ 60 |
| Operating Relative Humidity | 5 ~ 95% |
| Operating Attitude | ≤2000 |

▾ Compatible Inverters





[HR5120]



System Component

| No. Item | Description | Qty |
|----------|-----------------------------------|-----|
| 1 | Control Unit | 1 |
| 2 | Battery Module | 6 |
| 3 | System Output Cable + | 1 |
| 4 | System Output Cable - | 1 |
| 5 | System Output Cable + screw | 2 |
| 6 | System Output Cable + nut | 2 |
| 7 | Grounding Cable | 6 |
| 8 | Battery Module Comm. Cable | 6 |
| 9 | Battery Module Series Power Cable | 5 |
| 10 | Battery to Control Unit + Cable | 1 |
| 11 | Battery to Control Unit - Cable | 1 |