



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	N/A					

▸ Mechanical Specifications

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 20					
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	Battery cluster control unit	1
2	Battery Module	HR5120	6
3	System Output Cable +	IF-PA-05716-P(orange)/SC10-6/8AWG/750mm	1
4	System Output Cable -	IF-PA-05716-P(black)/SC10-6/8AWG/750mm	1
5	System Output Cable + screw	M6/14mm	2
6	System Output Cable + nut	M6	2
7	Grounding Cable	SC1.5-5/16AWG/180mm	6
8	Battery Module Comm. Cable	RJ45/130mm	6
9	Battery Module Series Power Cable	IF-PA-05716-P(orange)/IF-PA-05716-P(black)/8AWG/120mm	5
10	Battery to Control Unit + Cable	IF-PA-05716-P/8AWG/1100mm	1
11	Battery to Control Unit - Cable	IF-PA-05716-P/8AWG/60mm	1