

High Voltage Lithium-ion Battery



QS HV5-01

3

102.4V 5.3kWh
Stackable up to 3 modules

1
C

1C charging/discharging

IP65

IP65(Outdoor)

4+2
LED

4 LED (SOC: 25%-SOC 100%
blue), 2 LED (working green,
alarming red)



Safety and long lifespan, high efficiency and high-power density.



Battery module auto networking, automatic IP addressing, easy maintenance, free stand design and saving installation space



Support high discharge power, module level Auto-balancing.



Remotely monitoring and upgradable, support USB drive upgrade for the firmware.



Intelligent BMS, providing complete protection.



Whole module non-toxic, pollution-free.

MODEL	QS HV5-02-1	QS HV5-02-2	QS HV5-02-3
Schematic Drawing			
Battery Module		102.4V 5.3kWh	
Cell Type		LFP (LiFe PO ₄)	
Number of Modules	1	2	3
Total Energy [kWh]	5.3	10.6	15.9
Nominal Voltage [V]	102.4	204.8	307.2
Operating Voltage [V]	80 - 116.8	160 - 233.6	240 - 350.4
Max. Charge / Discharge Current [A]	50	50	50
Continue Discharge Output [kW]	5	10	15
Dimension [W*D*H]	740 * 220 * 565mm	740 * 220 * 900mm	740 * 220 * 1235mm
Approximate Weight [KG]	66	116	166

General Specifications

Recommend Depth of Discharge	90%
LED Indicator	4 LED (SOC: 25%-SOC, 100% blue), 2 LED (working green, alarming red)
IP Rating of Enclosure	IP65
Operating Temperature	Optional: Charge/Discharge: 0°C-50°C(without heating film); Charge/Discharge: -20°C-50°C(with heating film)
Storage Temperature	0 C - 35°C
Humidity	≤95%
Altitude	≤2000m
Cycle Life	10 + years, ≥6000 cycles (70% EOL , 25°C)
Installation	Stack, Floor-mounted
Communication Port	CAN2.0
Certification	UN38.3, IEC62619

[1] DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

[2] The current is affected by temperature and SOC.

Introduction

Queen Solar Residential Li-ion Battery System QSHV5-02 is a high voltage lithium battery with an integrated battery system that stores your energy for backup protection when the grid goes down. The compact, minimalist construction features versatile mounting options for indoor or outdoor spaces.

This series is especially suitable for application scene of high power, limited installation space, restricted load-bearing and long cycle life.

This series has built-in BMS battery management system, which can manage and monitor cells information including voltage, current and temperature. BMS can balance cells charging and discharging to extend cycle life.

Multiple battery modules can connect in series to expand capacity and power for larger capacity and longer power supporting duration requirements.

Modules

High Voltage Battery Control Unit (BCU)

Operating Voltage	70 - 600Vdc
Max Charge / Discharge Current	50A
Ingress Protection	IP65
Operating Temperature	Optional: Charge/Discharge: 0°C-50°C(without heating film); Charge/Discharge: -20°C-50°C(with heating film)
Storage Temperature	0°C - 35°C
Dimension (W*D*H)	740*220*170mm
Approximate Weight	11KG



Battery Module

Battery Type	LiFePO ₄ (LFP)
Nominal Voltage	102.4Vdc
Nominal Capacity	52Ah
Nominal Energy	5.3kWh
Max Charge / Discharge Current	50A
Operating Temperature	Optional: Charge/Discharge: 0°C-50°C(without heating film); Charge/Discharge: -20°C-50°C(with heating film)
Storage Temperature	0°C - 35°C
Ingress Protection	IP65
Dimension (W*D*H)	740*220*335mm
Approximate Weight	50KG



Base

Dimension (W*D*H)	740*220*60mm
Approximate Weight	5KG

