



High Voltage Lithium-ion Battery

QS HV10-01

Max.
6

102.4V 10.24kWh
Stackable up to 6 modules
Support up to 4 clusters in parallel

1
C

1C charging/discharging

IP65

IP65(Outdoor)

Black
Start

Support black-start function,
responsive fast and own strong
independence.



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



Whole module non-toxic, pollution-free.



Support high discharge power, module level Auto-balancing, under-voltage automatic restart.



Battery module auto networking, automatic addressing, easy maintenance, free stand design and saving installation space. The battery pack is blind-inserted to simplify installation and replacement.



Intelligent BMS, providing complete protection, setting up the heating film which supports low temperature heating.



Remotely monitoring and upgradable. Support snapshot function for fault analysis and historical data records.

MODEL	QS HV10-01-1	QS HV10-01-2	QS HV10-01-3	QS HV10-01-4	QS HV10-01-5	QS HV10-01-6
Schematic Drawing						
Battery Module	102.4V 10.24kWh					
Cell Type	LFP (LiFe PO ₄)					
Number of Modules	1	2	3	4	5	6
Total Energy [kWh]	10.24	20.48	30.72	40.96	51.20	61.44
Nominal Voltage [V]	102.4	204.8	307.2	409.6	512	614.4
Operating Voltage [V]	80 - 116.8	160 - 233.6	240 - 350.4	320 - 467.2	400 - 584	480 - 700.8
Max. Charge / Discharge Current [A]	100	100	100	100	100	100
Continue Discharge Output [kW]	10	20	30	40	50	60
Dimensions (W*D*H)[mm]	1040* 530 * 410	1040* 530 *610	1040*530 *810	1040*530*1010	1040*530*1210	1040*530*1410
Approximate Weight [KG]	136.1	237.8	339.5	441.2	542.9	644.6

General Specifications

Recommend Depth of Discharge	90%
LED Indicator	4 LED (SOC: 25%-SOC, 100% blue, 2LED(working green, alarming red)
IP Rating of Enclosure	IP65
Operating Temperature	Optional: Charge/Discharge: -20°C - 50°C(with heating film); Charge/Discharge: 0°C - 50°C(without 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	CAN

[1] DC Usable Energy, test conditions: 90% DOD, 1C 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 Commercial Li-ion Battery System QS HV10-01 is a high voltage lithium battery with an integrated battery system that stores your renewable energy to maximize self-consumption or for backup protection when the grid goes off. The compact, edges-free, 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	80 - 700.8Vdc
Max Charge / Discharge Current	100A
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)	1040*530*130mm
Approximate Weight	22.4KG



Battery Module

Battery Type	LiFePO ₄ (LFP)
Nominal Voltage	102.4Vdc
Nominal Capacity	100Ah
Nominal Energy	10.24kWh
Max Charge / Discharge Current	100A
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)	1040*530*200mm
Approximate Weight	101.7KG



Base

Dimension (W*D*H)	1040*530*80mm
Approximate Weight	12KG

