

High Voltage Battery

PRODUCT MODEL

- QS HV5-01 (Battery)



Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection.



Reliable

Support high discharge power, module level Auto-balancing, under-voltage Automatic Restart.



Flexible

Modular design, easy to expand, Max. capacity of 26.5kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.



Convenient

Battery module auto networking, Automatic IP addressing, easy maintenance, remotely monitoring and upgrade, support USB drive upgrade the firmware.



Eco-Friendly

Use environmental protection materials, the whole module non-toxic, pollution-free.



Floor-Mounted

Free stand design, floor-mounted, saving installation space.



MODEL	QS HV5-01-1	QS HV5-01-02	HV5-01-03	QS HV5-01-04	QS HV5-01-05
Total Energy [kWh]	5.3	10.6	15.9	21.2	26.5
Battery Module	QS HV5-01 102.4V 5.3kWh				
Number of Modules	1	2	3	4	5
Cell Type	LFP (LiFe P04)				
Nominal Voltage [V]	102.4	204.8	307.2	409.6	512
Operating Voltage [V]	80 - 116.8	160 - 233.6	240 - 350.4	320 - 467.2	400 - 584
Max. Charge / Discharge Current [A]	50A	50A	50A	50A	50A
Continue Discharge Output [kW]	5kW	10kW	15kW	20kW	25kW
Dimensions [W*D*H]	740 * 366 * 400mm	740 * 366 *620mm	740 * 366 *840mm	740 * 366*1060mm	740 * 366*1280mm
Approximate Weight [KG]	69KG	119KG	169KG	219KG	269KG

Other Parameter

Recommend Depth of Discharge	90%
LED Indicator	4 LED (SOC: 25%-SOC, 100% blue), 2 LED (working green, alarming red)
IP Rating of Enclosure	IP40 (Indoor) & IP65 (Outdoor)
Operating Temperature	Charge: 0°C - 50°C/ Discharge: 0°C - 50°C
Storage Temperature	0°C - 35°C
Humidity	≤ 95%
Altitude	≤ 2000m
Cycle Life	10 + years, 6000 cycles (90% DOD, 25°C)
Installation	Stack, Floor-mounted
Communication Port	CAN2.0, RS485
Certification	UN38.3, IEC62619, UI1973

[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 QSHV5-01 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. What's more, 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 an longer power supporting duration requirements.

System Components

MODEL		
QS HV5-01	High Voltage Battery Control Unit (BCU)	
Operating Voltage	70 - 600Vdc	
Max Charge / Discharge Current	50A	
Ingress Protection	IP40 (Indoor) & IP65 (Outdoor)	
Operating Temperature	0°C - 50°C	
Storage Temperature	0°C - 35°C	
Dimension (W*D*H)	740*366*120mm	
Approximate Weight	12KG	
QS HV5-01	Battery Module	
Battery Type	LiFePO4(LFP)	
Nominal Voltage	102.4Vdc	
Nominal Capacity	52Ah	
Nominal Energy	5.3kWh	
Max Charge / Discharge Current	50A	
Operating Temperature	0°C - 50°C	
Storage Temperature	0°C - 35°C	
Ingress Protection	IP40 (Indoor) & IP65 (Outdoor)	
Dimension (W*D*H)	740*366*220mm	
Approximate Weight	50KG	
QS HV5-01	Base	
Dimension (W*D*H)	740*366*60mm	
Approximate Weight	7KG	

High Voltage Battery

PRODUCT MODEL

- QS HV5-02 (Battery)



Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection.



Reliable

Support high discharge power, module level Auto-balancing, under-voltage Automatic Restart.



Flexible

Modular design, easy to expand, Max. capacity of 15.9kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.



Convenient

Battery module auto networking, Automatic IP addressing, easy maintenance, remotely monitoring and upgrade, support USB drive upgrade the firmware.



Eco-Friendly

Use environmental protection materials, the whole module non-toxic, pollution-free.



Floor-Mounted

Free stand design, floor-mounted, saving installation space.



MODEL	QS HV5-02-1	QS HV5-02-02	QS HV5-02-03
Total Energy [kWh]	5.3	10.6	15.9
Battery Module	QS HV5-02 102.4V 5.3kWh		
Number of Modules	1	2	3
Cell Type	LFP (LiFe P04)		
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]	50A	50A	50A
Continue Discharge Output [kW]	5kW	10kW	15kW
Dimension [W*D*H]	740 * 220 * 565mm	740 * 220 * 900mm	740 * 220 * 1235mm
Approximate Weight [KG]	66KG	116KG	166KG

Other Parameter

Recommend Depth of Discharge	90%
LED Indicator	4 LED (SOC: 25%-SOC, 100% blue), 2 LED (working green, alarming red)
IP Rating of Enclosure	IP40 (Indoor) & IP65 (Outdoor)
Operating Temperature	Charge: 0°C - 50°C / Discharge: 0°C - 50°C
Storage Temperature	0°C - 35°C
Humidity	≤ 95%
Altitude	≤ 2000m
Cycle Life	10 + years, 6000 cycles (90% DOD, 25°C)
Installation	Stack, Floor-mounted
Communication Port	CAN2.0, RS485
Certification	UN38.3, IEC62619, UI1973

[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 QS HV5-02 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. What's more, 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 an longer power supporting duration requirements.

System Components

MODEL		
QS HV5-02	High Voltage Battery Control Unit (BCU)	
Operating Voltage	70 - 600Vdc	
Max Charge / Discharge Current	50A	
Ingress Protection	IP40 (Indoor) & IP65 (Outdoor)	
Operating Temperature	0°C - 50°C	
Storage Temperature	0°C - 35°C	
Dimension (W*D*H)	740*220*170mm	
Approximate Weight	11KG	
QS HV5-02	Battery Module	
Battery Type	LiFePO4(LFP)	
Nominal Voltage	102.4Vdc	
Nominal Capacity	52Ah	
Nominal Energy	5.3kWh	
Max Charge / Discharge Current	50A	
Operating Temperature	0°C - 50°C	
Storage Temperature	0°C - 35°C	
Ingress Protection	IP40 (Indoor) & IP65 (Outdoor)	
Dimension (W*D*H)	740*220*335mm	
Approximate Weight	50KG	
QS HV5-02	Base	
Dimension (W*D*H)	740*220*60mm	
Approximate Weight	5KG	