

Low Voltage Lithium-ion Battery



QS LV5-04

8

51.2V 5.12kWh
Max. 8 parallel
operating in a system



Double protection

400

Max. system current 400A

1C

1C charging/discharging



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



Support high discharge power, module level Auto-balancing,



Intelligent BMS, providing complete protection.



Whole module non-toxic, pollution-free.



Integration of system functions, easy to use



Remotely monitoring and upgrade, support IOT function, DTC function and snapshot function.

QS LV5-04

MODEL	QS LV5-04	2 X QS LV5-04	3 X QS LV5-04	4 X QS LV5-04
Schematic Drawing				
Total Energy [kWh]	5.12	10.24	15.36	20.48
Battery Module	51.2V 5.12kWh			
Number of Modules	1	2	3	4
Cell Type	LFP (LiFe PO ₄)			
Nominal Voltage [V]	51.2	51.2	51.2	51.2
Operating Voltage Range [V]	40-58.4	40-58.4	40-58.4	40-58.4
Max. Charge / Discharge Current [A]	100	200	300	400
Continue Discharge Output [kW]	5	10	15	20
Dimensions (W*D*H)[mm]	440*620*346	440*620*519	440*620*692	440*620*865
Approximate Weight [KG]	50	100	150	200

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	IP20
Operating Temperature	Charge: 0 °C - 50 °C / Discharge: -20 °C - 50 °C
Storage Temperature	0 °C - 35 °C
Humidity	≤ 95%
Altitude	≤ 2000m
Cycle Life	5 + years, 3000 cycles (70% EOL , 25 °C)
Installation	Floor-mounted
Communication Port	CAN
Certification	

[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 Residential Li-ion Battery System QS LV5-04 is a Low voltage lithium battery with an integrated battery system that stores your energy for backup protection 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 can balance cells charging and discharging to extend cycle life.

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

Module

Saturn LV5-04

Battery Type	LFP (LiFe PO ₄)
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Max .Charge / Discharge Current	100A
Operating Temperature	Charge: 0°C - 50°C/Discharge: -20°C - 50°C
Storage Temperature	0°C - 35°C
Ingress Protection	IP20
Dimension [W / D / H]	440*620*133mm
WeightApproximate	50KG

Battery System

Battery Type	LFP (LiFe PO ₄)
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Max .Charge / Discharge Current	100A
Operating Temperature	Charge: 0°C - 50°C/Discharge: -20°C - 50°C
Storage Temperature	0°C - 35°C
Ingress Protection	IP20
Dimension [W / D / H]	440*620*133mm
WeightApproximate	50KG



Research and Development Version-Not Final Specifications