SWA-WM-16S200

Renewable Energy Storage

Performance Specifications

General Information

Nominal Voltage	51.2 Vdc
Nominal Capacity	200 Ah
Nominal Energy	10240 Wh
Battery Chemistry	3.2V $LiFePO_4$
Cell Connectivity	16S2P
Efficiency (Round Trip)	⩾98%
Self-Discharge Rate	＜3% Monthly
Max. In Parallel	16 Pcs
Max. In Series	Not Allowed
Cycle Life *0.2C,25℃@80% DoD*	6500 Cycles
Origin	Shenzhen, China
BMS Build-in	Yes

Operating Parameters

Operating Voltage Range	44.8V-57.6V
Discharge Cut-Off Voltage	40V
Max. Discharge Current	100A
Peak Discharge Current	150A (3s)
Max. Charge Voltage	58.4V
Standard Charge	40A (0.2C)

Environmental Specifications

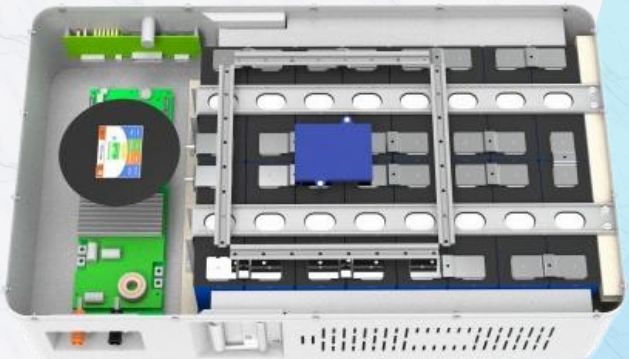
Discharge Temperature	-20℃ ~ 55℃
Charge Temperature	0℃ ~ 55℃
Storage Temperature	-10℃ ~ 30℃
Ingress Rating	IP52

Mechanical Specifications

Dimensions (L*W*H)	680*412*231 mm
Weight	80 Kg
Mounting Options	Wall
Indicator State	ALM/RUN/SoC

Others

Screen	Touchable LED
Terminals	Magnetic Plug-In
Case Material	SPCC Steel
Bracket	Yes
Heating	Optional
Bluetooth(App)	Optional



BMS Protection Characteristics

Primary Charging	Current :105A	Delay Time: 20s
Second Charging	Current :110A	Delay Time: 2~3s
Primary Discharging	Current :110A	Delay Time: 10s
Second Discharging	Current :150A	Delay Time:100ms
Over-Charge Voltage	Voltage :58.4V	Delay Time: 1~2s
Over-Discharge Voltage	Voltage :40V	Delay Time: 1~2s
Temperature	PCB Temperature ≥ 95℃ Recover ≤ 85℃	
Communication Port	RS485,Optional For CAN/Dry Contact	

www.swa-energy.com
Shenzhen SWA Energy Co.Ltd

Constant Current Discharge Data (Amperes @ 25°C)

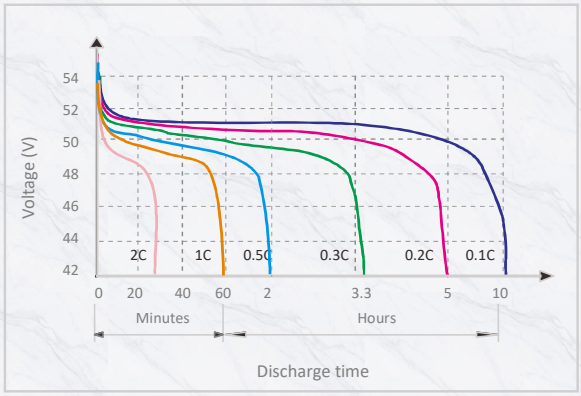
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	100A	66.6A	50A	40A	20A	10A

Constant Power Discharge Data (Watts @ 25°C)

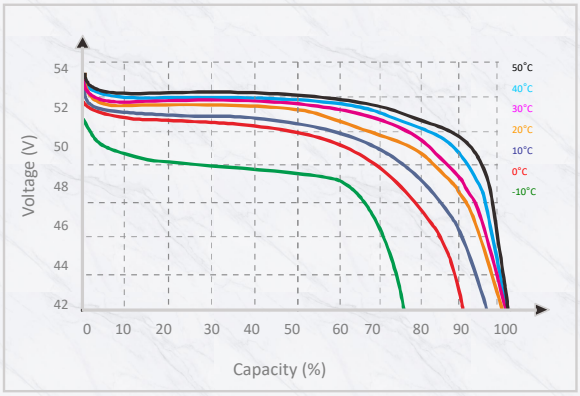
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	5120W	3413.3W	2560W	2048W	1024W	512W

Testing Report Curve

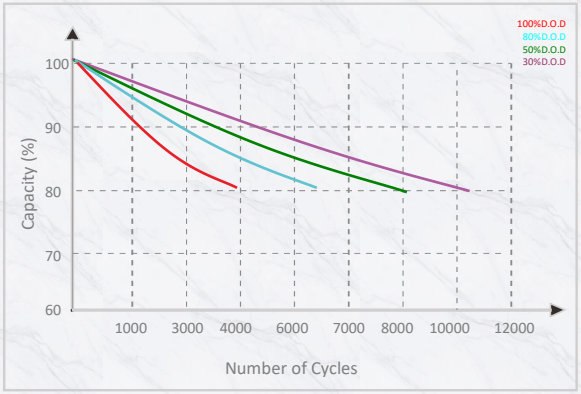
Discharge Characteristics (25°C)



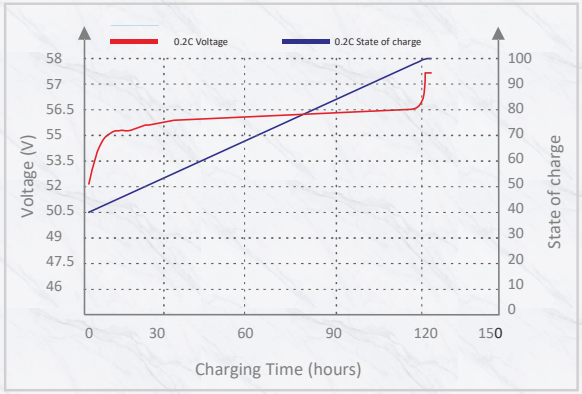
Temperature VS Discharge (0.2C)



DoD VS Cycle Life (0.2C 25°C)



State of Charge (0.2C, 25°C)



Note 1. The recommended storage temperature is 20ºC to 30ºC, battery life would be reduced if stored at high temperature (The recharging interval should be 12 months under the condition of storage temperature < 30ºC, and 8 months under the condition of 30ºC < storage temperature < 40ºC).
Note 2. Affected by the external environment factors, such as temperature and duration of transportation and storage, the rated capacity may fluctuate by ±5%.