

SWA-RM- 16 S I 00

Performance Specifications

General Information

Nominal Voltage	51.2Vdc			
Nominal Capacity	100Ah			
Nominal Energy	5120Wh			
Battery Chemistry	3.2V LiFePO ₄			
Cell Connectivity	16S1P			
Efficiency (Round Trip)	≥ 98%			
Self-Discharge Rate	<3% Monthly			
Max. In Parallel	16 Pcs			
Max. In Series	Not Allowed			
Cycle Life 0.2C,25°C@80%DoD	6500 Cycles			
Origin	Shenzhen, China			
BMS Build-in	Yes			



one-stop energy storage battery solutions

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	20A(0.2C)

Environmental Specifications

Discharge Temperature	-20°C \sim 55°C
Charge Temperature	$0^{\circ}\text{C} \sim 45^{\circ}\text{C}$
Storage Temperature	$0^{\circ}\text{C} \sim 35^{\circ}\text{C}$
Ingress Rating	IP20

Mechanical Specifications

Dimensions (L*W*H)	480*442*155 mm (3.50				
Weight	≈47Kg				
Mounting Options	Rack				
Indicator State	ALM/RUN/SoC				

Others

Screen	Buttom LCD
Terminals	M8 Screw
Case Material	19"SPCC Steel
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 Voltag	e Voltage : 40V	Delay Time: 1∼2s			
Temperature	PCB Temperature ≥95°C				
	Recover ≤85°C				
Communication Port	RS485,Optional Fo	r CAN/Dry Contact			









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Constant Current Discharge Data (Amperes @ 25°C)

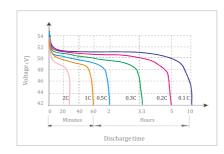
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (40 V)		50A	33.3A	25A	20A	10A	5A

Constant Power Discharge Data (Watts @ 25°C)

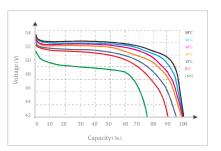
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (40V)		2560W	1706.7W	1280W	1024W	512W	256W

Testing Report Curve

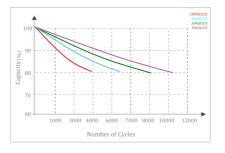
Discharge Characteristics (25°C)



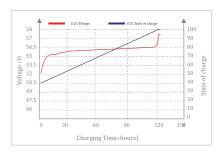
Temperature VS Discharge (0.2C)



DoD VS Cycle Life (0.2C 25°C)



State of Charge (0.2C, 25°C)



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

