



SPECIFICATIONS

MODEL RS51100

VERSION 3.1



RS51100 48V/100AH

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Model

Energy Rating	51.2V 100Ah (5.12kWh)
Energy Scalability	32 × Parallel (163.84kWh)

Charging/Discharging

Max Continuous Discharge Power	90A (4.6kW)
Recommended Discharge Power	75A (3.84kW)
Inverter Start-Up Capability	PWM Technology Start-Up
Peak Discharge Power (3 sec)	200A (10.2kW)
Max Continuous Charging Power	70A (3.58kW)
Recommended Absorb Volts	56.8V
Max Absorb Volts (Solar Only)	57.6V
Absorb Done Amps (per Battery)	4% of capacity
Absorb Done Time	10 min
Float Voltage	54.4V
Temp Comp—mV Degrees Celsius	0
Max Recommended Discharge	51V (20%)
Inverter Low Battery Cutout	48V
Peukert Exponent	1.04

Installation Requirements

Ventilation Required	No
Minimum Environment Temp	32 °F
Maximum Environment Temp	120 °F
IP Rating	IP50
Outdoor Rated	No
Installation Position	Horizontal with Base Unit Only
Maximum Batteries per Stack	7

Terminal Specs

M8 Stainless Steel	Bolt-On
Max Terminal Torque	18 ft-lbs

SPECIFICATIONS, CONTINUED

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Cycle Life Rating

Rated Cycle Life (100% DoD)	4,500 Cycles
Rated Cycle Life (80% DoD)	6,000 Cycles
Rated Cycle Life (50% DoD)	8,000 Cycles
Retained Capacity at End of Cycle Life	80%

Safety Features

Breaker Current Rating	150A
BMS Low Voltage Disconnect	41 +/-1V
BMS High Voltage Disconnect	59 +/-1V
BMS Low Temp Charging Disconnect	32 °F
BMS Low Discharging Disconnect	0 °F
Low Volts Cutout Wakeup	44V
High Volts Cutout Wakeup	55V
BMS High Temp Disconnect	135 °F
Pressure Vented Cells	Yes
Rapid Shut Down Function (RPSD)	Yes
EN IEC 61000-6-1:2019	Yes

Certifications

Battery Certification	UL 9540A
Transport	UN 38.3

Internal Components

Cell Chemistry	LiFePO4
Cell Format	Prismatic
Balancing Type	Impactiv
Max Balancing Current	1.1A
Cell Connection	Welded busbar

Touchscreen LCD Features

State-of-Charge	Charging/Discharging Current	Fault Logging
Pack Voltage	Individual Cell Voltage	Closed Loop Comm Plus

Dimensions

Battery	22.6" × 19.3" × 6.2"
Base	22.6" × 19.3" × 6.8"
Lid	22.6" × 19.3" × 0.8"

SPECIFICATIONS, CONTINUED

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Spacing

Minimum Spacing between Batteries and Wall	1 inch
Minimum Spacing between Parallel Battery Stacks	1 inch
Minimum Spacing between Top of Battery Stack and Solar Equipment on Wall	6 inches
Minimum Spacing between Battery Bank and Water Sources/Conductors	4 feet

Weight

Battery Weight	108 lb
Base Weight	42 lb
Lid Weight	20.9 lb



HOW DOES IT STACK UP?

Each unit provides 5.12kWh.

