

# RES39220K



## OUTDOOR FLOOR MOUNTED LI-ION BATTERY



### SAFETY

- + Long life type prismatic LiFePO4 cells, suitable for energy storage application.
- + Low voltage system, safety for application.
- + Cell certification: IEC62619, UL1973, UL9540A, ROHS
- + Battery certification: UN38.3, MSDS, CE

### DESIGN

- + Outdoor floor mounted design, IP65 class.
- + Flexible and easily installation, bottom with rollers.
- + -20~+55°C widely temperature range.
- + Maintenance free.

### SCALABILITY

- + Parallel support for more energy.
- + Communication compatible with the major inverter manufacturers.

### BATTERY MANAGEMENT SYSTEM

- + Panasonic AFE + ST MCU, Highly reliability and widely temperature range.
- + Independent protection for charge and discharge.
- + OVP, LVP, OCP, OTP, LTP, Short-circuit protection.
- + RS485, CAN communication port for inverter and Link in& out for battery to battery parallel communication.

# RES39220K

## SPECIFICATION

Part Number	
Model	RES39220K
Nominal Voltage [V]	51.2
Nominal Capacity [Ah]	392
Total Energy [Wh]	20070
Dimension (W*D*H, mm)	730*220*810
Weight [Kg]	153.0
Max. Charging Current [A]	200
Max. Discharging Current [A]	200
Pulse Discharge Current	220A @ 10s
Charging Voltage [V]	55.2~57.6
End of Discharge Voltage [V]	44.8
Operation Humidity	0~95% RH (No condensing)
Operating Temperature Range	Charge: 0 ~ +55°C; Discharge: -20 ~ +55°C
Cycle Life <sup>(1)</sup>	>6000
Designed Calendar Life	10 Years
Communication interface	For inverter : RS485, CAN For battery to battery: LINK-IN, LINK-OUT
Protection	Over voltage , Low voltage, Over current, Over Temperature, Low Temperature, Short circuit
Parallel Support <sup>(2)</sup>	Yes, Max. 6 Sets
Series Support	Not support

Note:

(1) 25°C, 0.5C /0.5C , 90%DOD to 80% of initial capacity.

(2) For parallel connection, refer to user manual.

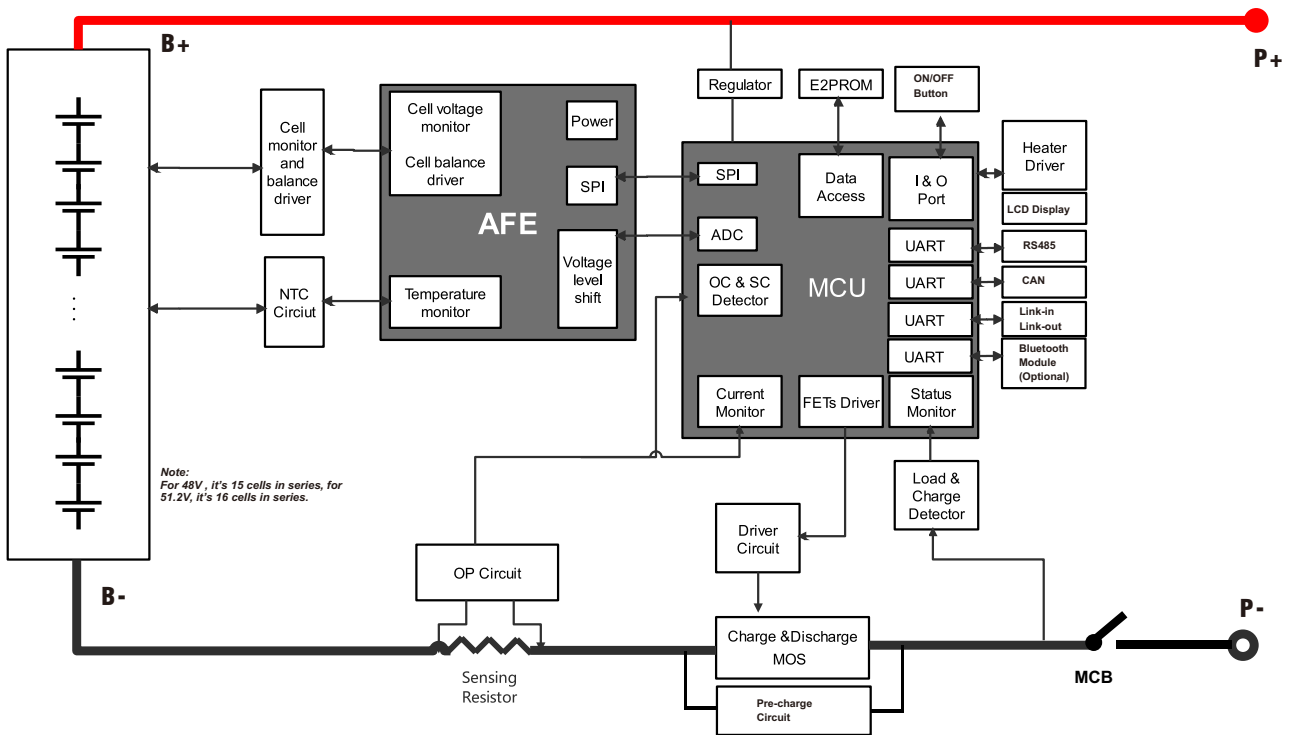
## BMS Parameters

S/N	Parameters	Default Setting	Adjustable or not	
1	Cell OV alarm	3500mV	Adjustable	
	Cell Over-voltage protection	Cell OV protection	3650mV	Adjustable
		Delay time	1.0S±0.5S	Adjustable
		Release voltage	3320mV	Adjustable
	Cell OV protection release	Discharge release	Discharge current > 1A	
2	Cell LV alarm	2900mV	Adjustable	
	Cell Low-voltage protection	Cell LV protection	2800mV	Adjustable
		Delay time	1S	Adjustable
		Release voltage	3050mV	Adjustable
	Cell LV protection release	Charge release	connect to charger	
3	System OV alarm	3.5V*Cells series	Adjustable	
	System Over-voltage protection	System OV protection	3.65V*Cells series	Adjustable
		Delay time	1.0S	Adjustable
		Release voltage	3.38V*Cells series	Adjustable
	System OV protection release	Discharge release	Discharge current > 1A	
4	System LV alarm	2.9V*Cells series	Adjustable	
	System Low-voltage protection	System LV protection	2.8V*Cells series	Adjustable
		Delay time	1S	Adjustable
		Release voltage	2.9V*Cells series	Adjustable
	System LV protection release	Charge release	connect to charger	
5	OC alarm	210A	Adjustable	
	Charge Over-current protection	OC protection	220A	Adjustable
		Delay time	1.0S	Adjustable
		Automatic release	1min automatic release	
	Charge OC protection release	Discharge release	discharge current > 1A	

S/N	Parameters	Default Setting	Adjustable or not	
6	OC Alarm-1	220A	Adjustable	
	Discharge Over-current protection	OC protection	240A	Adjustable
		Delay time	5.0S	Adjustable
		Automatic release	It will be automatically released after 1min. If it repeat 10 times, the state will be locked.	
	Discharge Over-current protection release	Discharge release		
		Charge release	charge current > 1A	
7	Short circuit protection	Yes		
	Short circuit protection	Release voltage	Charge the battery	
			Remove the load	
8	MOS HT alarm	90°C	Adjustable	
	MOS high temperature protection	MOS HT protection	110°C	Adjustable
		MOS protection release	85°C	Adjustable
9	Cell temperature	Charge low temperature alarm	5°C	Adjustable
		Charge low temperature protection	0 °C	Adjustable
		Charge low temperature protection release	5°C	Adjustable
		Charge high temperature alarm	60°C	Adjustable
		Charge high temperature protection	65°C	Adjustable
		Charge high temperature protection release	60°C	Adjustable
		Discharge low temperature alarm	-15°C	Adjustable
		Discharge low temperature protection	-20°C	Adjustable
		Discharge low temperature protection release	-15°C	Adjustable
		Discharge high temperature alarm	65°C	Adjustable
Discharge high temperature protection	70°C	Adjustable		
Discharge high temperature protection release	60°C	Adjustable		

S/N	Parameters	Default Setting	Adjustable or not
10	Ambient low temperature alarm	-20 °C	Adjustable
	Ambient low temperature protection	-25 °C	Adjustable
	Ambient low temperature protection release	-20 °C	Adjustable
	Ambient high temperature alarm	70°C	Adjustable
	Ambient high temperature protection	80°C	Adjustable
	Ambient high temperature protection release	70°C	Adjustable

**SYSTEM TOPOLOGY**



**Dimension**

