AMO Smart Energy Storage Battery

- **Intelligent** Each Battery With Independent BMS System
- **Perfect** Compatible With Most of The Available Hybrid Inverters
- **Easy to install** Plug And Play To Minimize The Installation Time
- **Long life & safety** Ensures ⩾ 6000 Cycles With 80% DOD
- **IP65 rated protection** Can Be Installed Indoors or Outdoors

AMOSOLAR
Power your future

Normal		
Model	AS51100	AS51200
Battery Type	LiFePO4(LFP)	LiFePO4(LFP)
Norminal Voltage(V)	51.2V	51.2V
Norminal Capacity(WH)	5120WH	10240WH
Usable Capacity(WH)	4600WH	9200WH
Design Life	10+ Years (25℃/77F)	10+ Years (25℃/77F)
Physical		
Dimension(mm)	480*483*178(L*D*H)	680*483*178 (L*D*H)
Weight(kg)	45.1	81.6
Electrical		
Cycle Life	≥6000cycles@25°C，80%Dod,0.5C	≥6000cycles@25°C，80%Dod,0.5C
Discharge Voltage(V)	48-56.5	48-56.5
Scalability	Up to 10 parallel	Up to 10 parallel
Charge / Discharge Current(A)	50A (Recommended) / 100A (Max)	50A (Recommended) / 100A (Max)
Internal Resistance	≤30mΩ	≤30mΩ
BMS		
Power Consumption	<2W(Work)<100mW(Sleep)	<2W(Work)<100mW(Sleep)
Monitoring Parameters	System voltage, current, cell voltage, cell temperature, module temperature	
SoC	Intelligent algorithm	Intelligent algorithm
Communication	CAN/ RS-485	CAN/ RS-485
Operation		
Operating Temperature Range	0℃-55℃	0℃-55℃
Transport or Storage Temperature Range	-20℃-55℃	-20℃-55℃
Humidity	15%-85%(No Condensing)	15%-85%(No Condensing)
Warranty		
Warranty	5 Years	

Equipment Interface Instruction

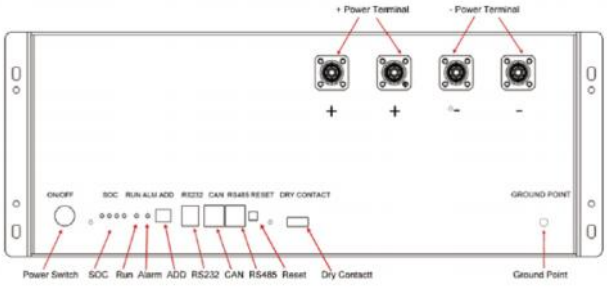
Power Switch: To turn ON/OFF the whole battery BMS standby, power output ready.

SOC Light: Green LEDs to show the battery's current capacity.

RUN light: Green LED flashing to show the battery is running.

Alarm light: Red LED flashing to show the battery has alarm, and lighting to show the battery is under protection.

RS232 CAN RS485



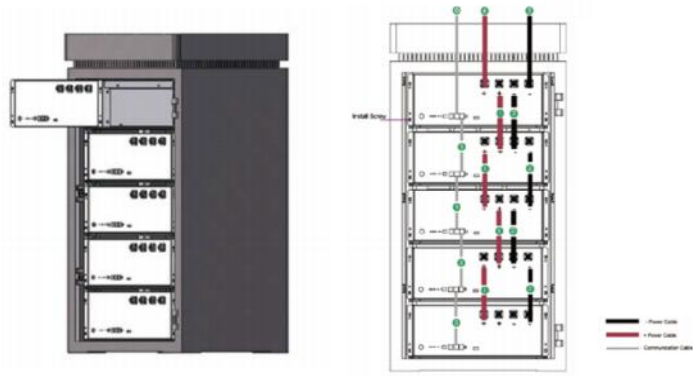
Installation

Put battery modules into cabinet and connect the cables, Put the battery into the cabinet, Drive the 4 pcs screws, Connect the cables between battery modules Connect the cables to inverter.

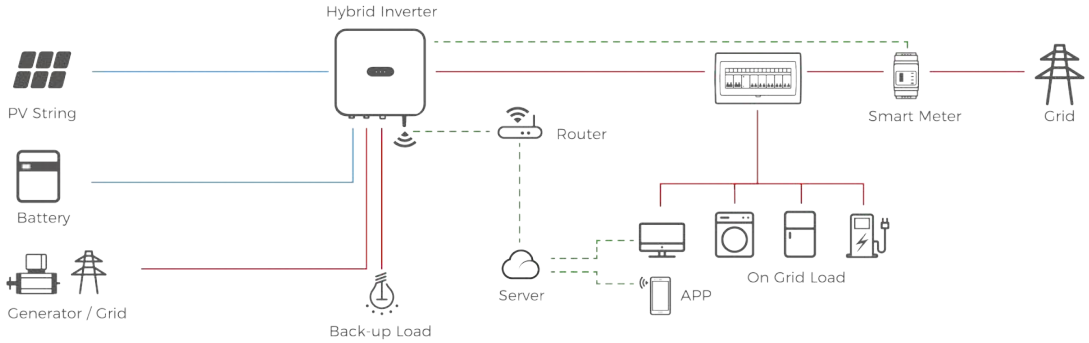
- Power On Double check all the power cable and communication cable.

- ON/ OFF Switch on all the battery modules and the green LED light below will be on:

- Set ADD Set ADD follow ADD instruction, pack 1 will be host, others are slaves.



Schematic Diagram of Solution



Trouble Shooting Steps

Problem determination based on: 1) Whether the battery can be turned on.2) If battery is turmed on, check the red light is off, fiashing or lighting;3) If the red light is off, check whether the battery can be charged/discharged.

Preliminary determination steps:1)Battery cannot be turned on, switch on the lights are all no lighting or flashing. If the battery extemal switch is ON, the RUN light is flashing, and the external power supply voltage is 51.2 vor more, the battery still unable to turn on, please contact distributor.

- The battery can be tumed on, but red light is lighting, and cannot be charged or discharged , red light is lighting, that means system is abnormal, please check values as following.

-Temperature: Above 50℃ or under-10℃, the battery could not work.Solution: to move battery to the normal operating temperature range between -10℃ and 50℃.

4)Current: If current is larger than 100A, battery protection will turn on.Solution: Check whether current is too large or not, if it is, to change the settings on power supplyside.

- High Voltage: If charging voltage above 58.4V battery protection will turn on. Solution: Check whether voltage is too high or not, if it is, to change the settings on power supply side 6)Low Voltage: When the battery discharges to 40V or less, battery protection will turn on.Solution:Charge the battery for some time, the red light will turn off.Excluding the four points above , if the faulty is still canot be located,turm offi battery and repair.

- The battery cannot be charged or discharged1) Cannot be chargedDisconnect the power cables measure voltage on power side if the voltage is 56.5-57.6V restanthe battery. connect the power cablle tn dicrhaye:Disconnect the oower battery and contact distributor.2) Unable to discharge:Disconnect the oower cables and measure voltage on battery side. if it is under 40v.please charge the battery: if voltage is above 51.2V and still canot discharge, turm off battery and contact . Emergency Situations

Emergency Situations

- Leaking Batteries If the battery pack leaks electrolyte, avoid contact with the leaking liquid or gas. If one is exposed to the leaked substance, immediately perform the actions described below Inhalation: Evacuate the contaminated area, and seek medical attention Contact with eyes: Rinse eyes with flowing water for 15 minutes, and seek medical attention.Contact with skin: Wash the affected area thoroughly with soap and water, and seek medical attention.Ingestion: Induce vomiting, and seek medical attention.

- Fire NO WATER! Only dry powder fire extinguisher can be used; it possible, move the battery pacf to a safe area before it catches fire.

- Wet Batteriesif the battery pack is wet or submerged in water do not let people access it, and then contact or an authorized dealer for technical support.

- Damaged Batteries are dangerous and must be handled with the utmost care.They are not fit for use and may pose a danger to people or property.If the battery pack seems to be damaged pack it in its original container, and thenretum it to or an authorized dealer.NOTE Damaged batteries may leak electrolyte orproduce flammable gas. If such damage occurs, please contact AMOSOLAR.