

#### **Product introduction:**

This product is composed of high quality lithium iron phosphate core (series-parallel connection) and advanced BMS management system. It adopts master-slave mode, which is convenient for monitoring and controlling the input and output system. The charging and discharging are independent, it can control the charging current of the AC charger and solar controller according to the battery temperature, voltage and SOC to better protect the battery cells from overcharging, overheating and discharging. It has high reliability and long life, products developed for applications such as solar energy storage, industrial and commercial energy storage, household energy storage, charging piles, data room and other applications.

The product adopts integrated design, higher integration, saving installation space; adopts domestic well-known brand high performance lithium iron phosphate cathode material, good core consistency, design service life of more than 10 years; the input and output circuit breakers are equipped with circuit breakers, which are safer and more reliable, front wiring, convenient installation and maintenance, easy operation; various functions, with single overvoltage/under-voltage, primary and secondary alarm protection, charge/discharge overcurrent, high temperature, low temperature, insulation and short circuit protection and recovery functions; strong compatibility, seamless docking with Inverter solar charge controller, AC/DC charger, charging piles and other major equipment; communication interface forms, CAN2.0 and so on can be customized according to customer needs, convenient system remote monitoring and flexible use. High energy, low power lithium electric equipment, achieve higher energy supply, lower energy consumption, and reduce environmental pollution; adopt all-round, multi-level battery protection strategy and fault isolation measures to ensure the safe operation of the system.

### **Product pictures:**





## **Product advantages:**

- All-in-one design, high integration and space saving installation;
- •Using high-performance lithium iron phosphate cells, laser welding, good cell consistency, designed service life of more than 10 years;



- Charging and discharging are controlled separately, which is convenient and reliable to control charging and discharging. The discharge port will not be disconnected when over-charging, and the charging port will not be disconnected when over-discharging, the system has good stability;
- Master-slave mode, passive equalization, can manage the equalization resistance, can set the equalization start voltage difference, and monitor the equalization resistance temperature, more intelligent and safe, and reduce the impact of barrel effect on system energy storage;
- •BMS adopts NXP(USA) automotive-grade high-performance chips, with strong anti-interference, good reliability and wide temperature range;
- •CAN2.0 communication interface, has the advantages of strong real-time performance, long transmission distance, strong anti-electromagnetic interference ability;
- System parameters can be set through the host computer, such as fan start/stop temperature, charger maximum current setting, charge and discharge current correction, SOC correction, with insulation leakage detection function to prevent oil leakage and short circuit of the cell;
- Integrate Solar charge controller or AC charger optional, BMS communication control, more safe and reliable;
- •Cell temperature management, can be automatically controlled with the air conditioner heater according to the cell condition to make the cell works at the most suitable temperature, and can be linked with the fire protection system as needed

#### **Performance characteristics:**

- Small size and light weight, Maintenance-free;
- Environmental protection and pollution-free materials, no heavy;
- Accurately estimate the state of charge of the battery pack, that is, the remaining power of the battery, to ensure that the power of the battery pack is maintained within a reasonable range;
- Built-in BMS management system with comprehensive protection and monitoring control functions;
- •5" LCD screen display, easy to operate, can check the temperature, voltage, working status, discharge current, dynamic and static SOC algorithm of a single cell, local display of alarm info, alarm level distinction, accurate positioning of abnormal cells;
- Main control MCU can be centrally controlled and manage peripheral settings (AC charging module, inverter module, solar charging module) to adjust the charging current and voltage of peripheral devices according to the battery charging curve, making the system more reliable;
- •BMS battery management system, with SOC automatic calibration and high current passive balance function, combined with perfect operation control and management strategy, to achieve accurate and efficient management;
- •EMS energy management system, BMS with solar controller/AC charger, inverter centrally manages charge and discharge, effectively controls the charge and discharge current within the cell usage conditions, protects the cell and extend its service life;



Model	SPVLI-76.8KWH					
Type of cell	LiFePO4 (Lithium iron phosphate)					
Battery configuration	3.2V 200AH 120PCS					
Rated capacity (KWH)	76.8kwh					
Nominal capacity (AH)	200AH					
Nominal voltage (VDC)	384V					
Operating voltage range (VDC)	312-438V					
Recommended Charge Voltage (VDC)	420V					
Recommended discharge cutoff voltage (VDC)	360V					
Recommended charge current(A)	100A					
Max Charge Current (A)	200A					
Recommended discharge current (A)	100A					
Max Discharge Current (A)	200A					
Charge temperature range	1~45°C					
Discharge temperature range	-10 ~ 45°C					
Solar Charge Controller Input	•					
Maximum. Input voltage of solar array (Vdc)	<750Vdc					
Battery system voltage	384VDC					
Maximum power of solar array	40KW					
Maximum charge current (A)	100A					
Equalization charging voltage (Vdc)	426V					
Equalize charging recovery voltage (Vdc)	405.6V					
Over voltage disconnect voltage (Vdc)	438V					
Over voltage recovery (Vdc)	432V					
Working temperature	-20~50°C					
Protection level	IP20					
Communication interface	CAN2.0, BMS					
Display	5" LCD, English					
Cooling system	Fan cooling					
Working Altitude (m)	≤3000m					
Reference Weight (Kg)	920Kg					
Reference size (W*D*H mm)	900*1100*1700mm					

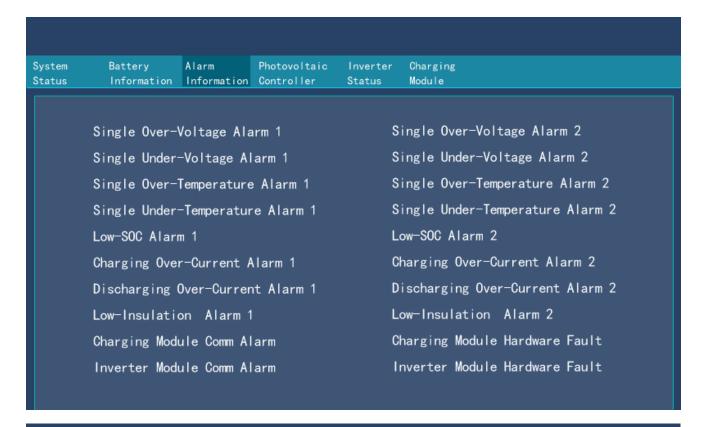


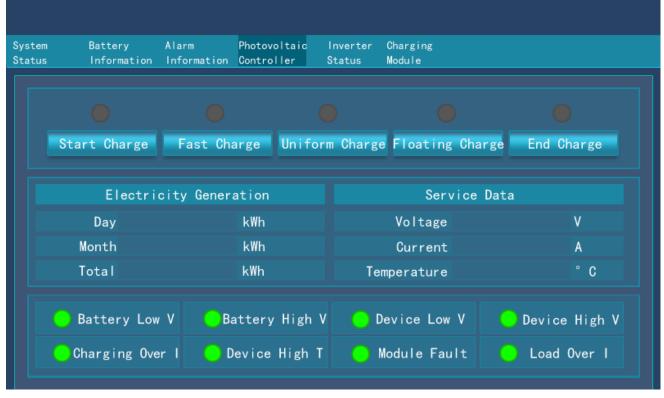
# LCD display details of BMS:



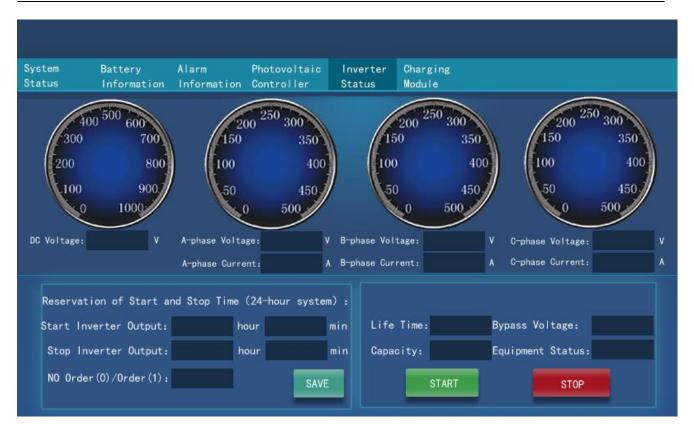
System Status	Batter Inform	y ation	Alarm Information	Photovol Controll		Inverter Status	Charging Module				NEXT
Num	Temp	Num	Temp	Num	Temp	Num	Temp	Num	Temp	Num	Temp
1		11		21		31		41		51	
2		12		22		32		42		52	
3		13		23		33		43		53	
4		14		24		34		44		54	
5		15		25		35		45		55	
6		16		26		36		46		56	
7		17		27		37		47		57	
8		18		28		38		48		58	
9		19		29		39		49		59	
10		20		30		40		50		60	











System Status	Battery Informat	Alarm ion Information	Photovoltaic Controller	Inverter Status	Charging Module		
	Moudle	Voltage (v)	Current (A)	Temper	ature (°C)	Status	Fault
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						



