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 over-voltage/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；

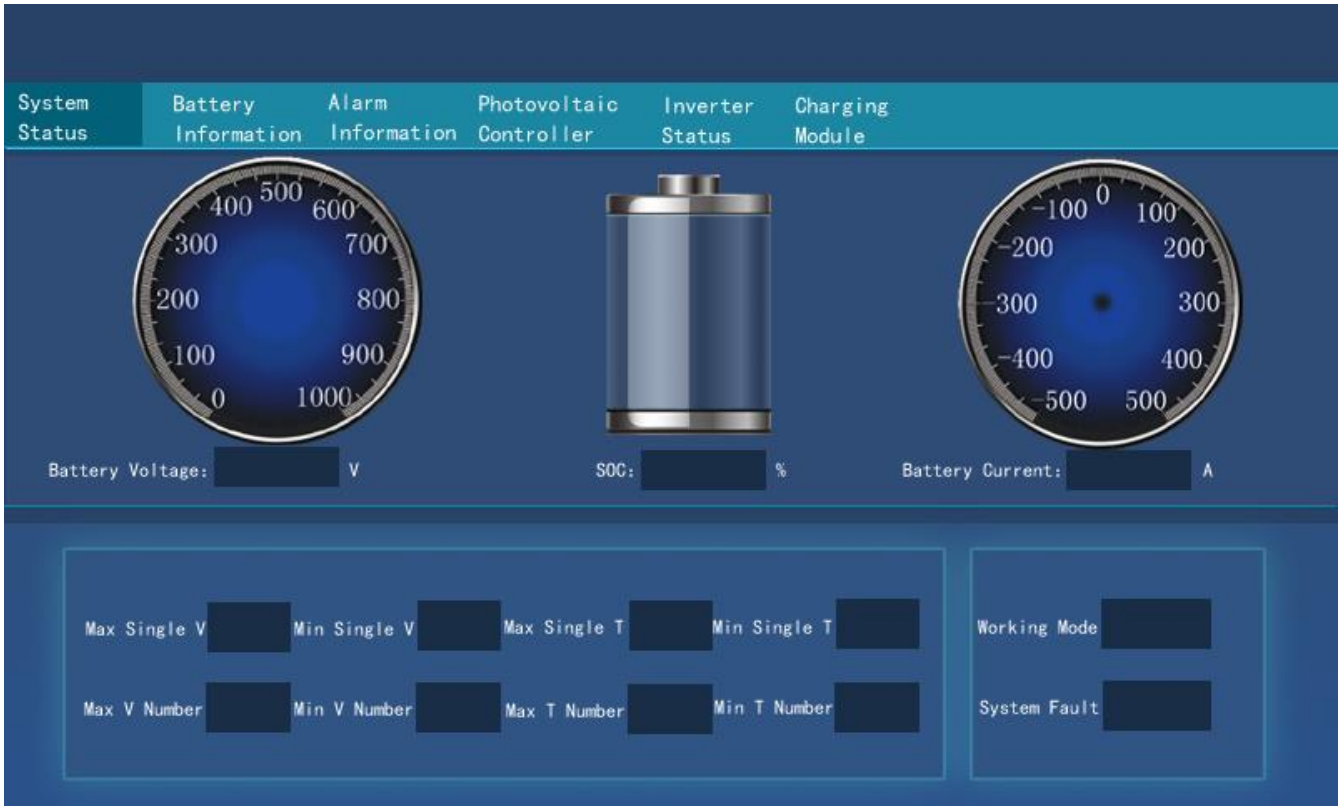
●BMS battery management system, with SOC automatic calibration and high current passive balance function, combined with perfect operation control and management strategy, to achieve accurate and efficient management；

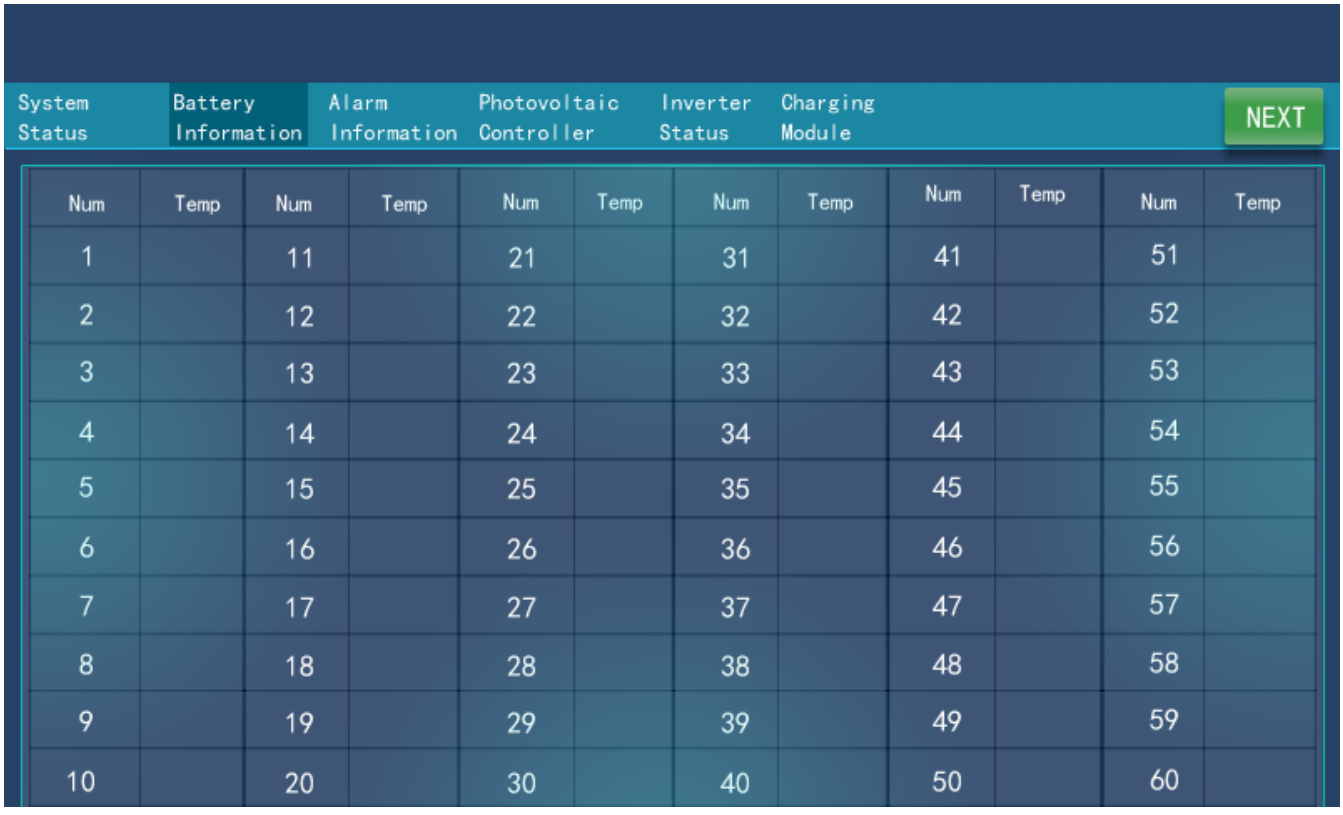
●EMS energy management system, BMS with solar controller/AC charger, inverter centrally manages charge and discharge, effectively controls the charge and discharge current within the cell usage conditions, protects the cell and extend its service life；

Parameters:

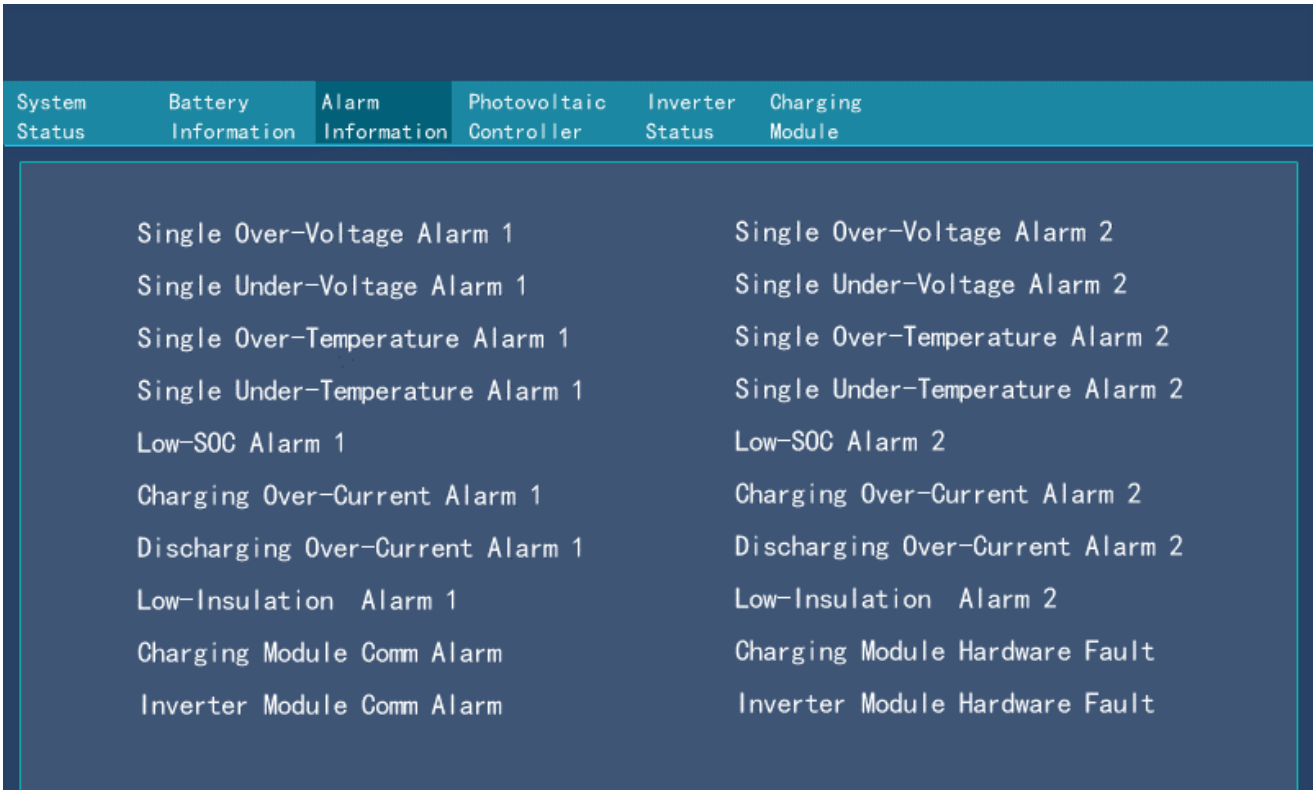
Model	**SPVLI-61.4KWH**
Type of cell	LiFePO4 (Lithium iron phosphate)
Battery configuration	3.2V/200AH cell 96PCS
Rated capacity (KWH)	61.4kwh
Nominal capacity (AH)	200AH
Nominal voltage (VDC)	307V
Operating voltage range (VDC)	250-350.4V
Recommended Charge Voltage (VDC)	336V
Recommended discharge cutoff voltage (VDC)	254V
Recommended charge current(A)	100A
Max Charge Current (A)	200A
Recommended discharge current (A)	100A
Max Discharge Current (A)	200A
Charge temp range	1~45℃
Discharge temp range	-10 ~ 45℃
Solar Charge Controller Input	
Maximum. Input voltage of solar array（Vdc）	<600V
Battery system voltage	307VDC
Maximum input power of solar array	30KW
Maximum charge current（A）	100A
Equalization charging voltage (Vdc)	340.8V
Equalize charging recovery voltage (Vdc)	324.5V
Over voltage disconnect voltage (Vdc)	350.4V
Over voltage recovery (Vdc)	345.6V
Working temperature	-20~50℃
Protection level	IP20 (indoor)
Communication interface	CAN2.0, BMS
Display	5" LCD, English
Cooling system	Fan cooling
Working Altitude (m)	≤3000m
Reference Weight (Kg)	780Kg
Reference size (W*D*H mm)	1070*980*1650mm

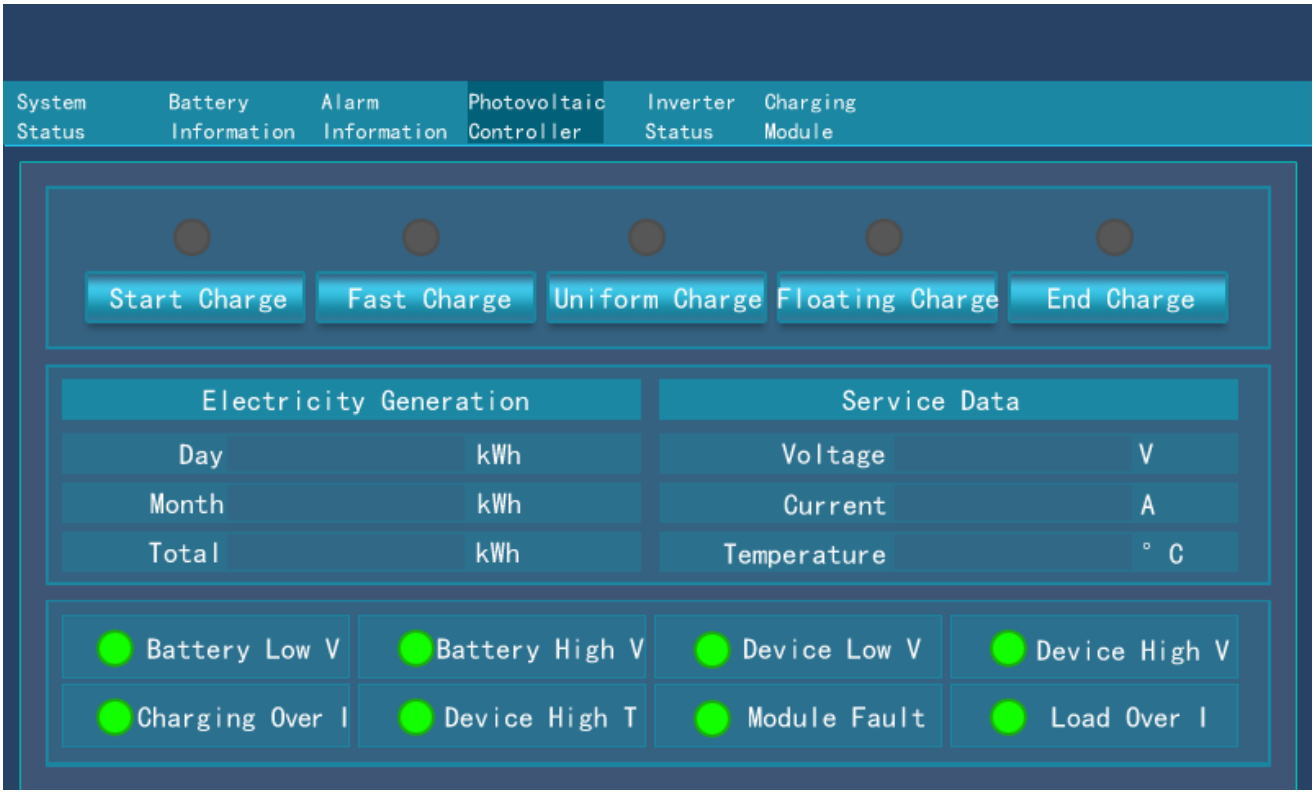
LCD display details of BMS:



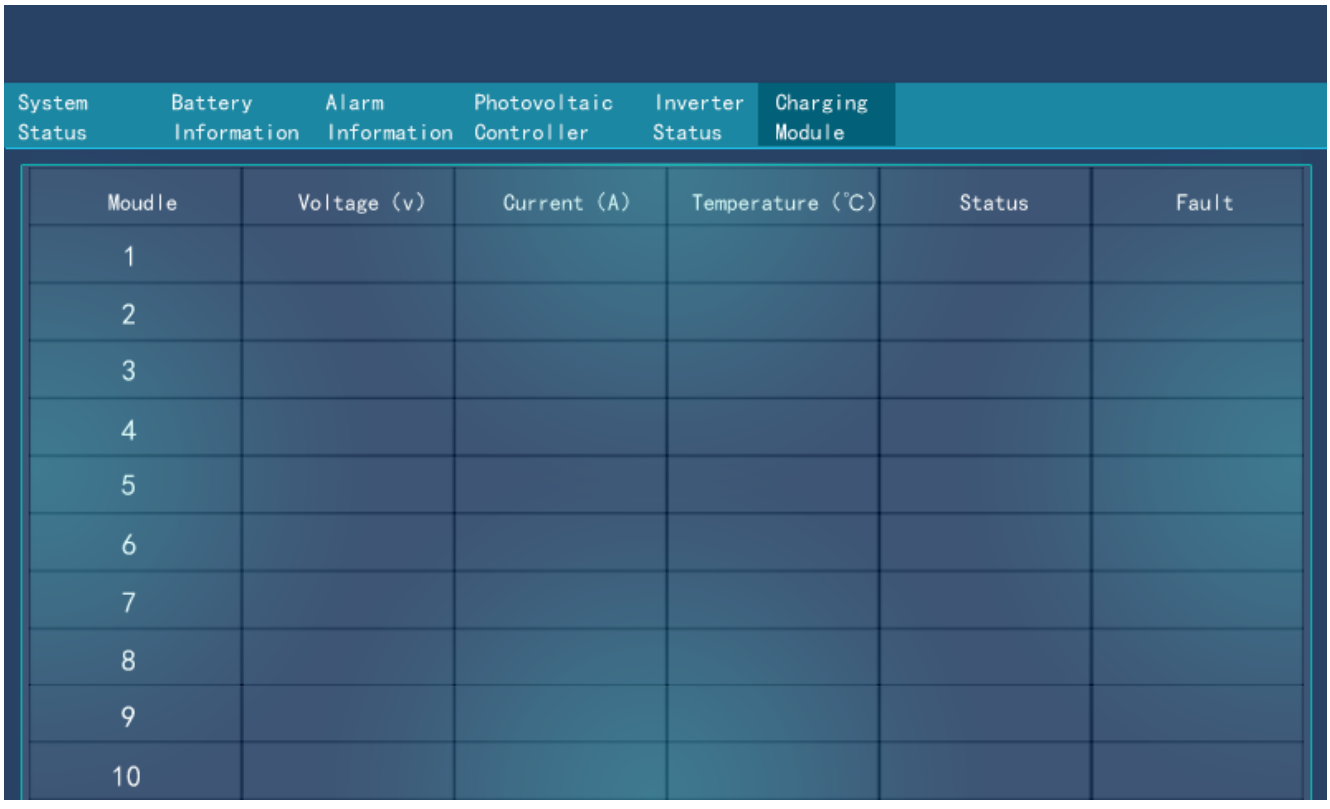


Num	Temp	Num	Temp	Num	Temp	Num	Temp	Num	Temp	Num	Temp
1		11		21		31		41		51	
2		12		22		32		42		52	
3		13		23		33		43		53	
4		14		24		34		44		54	
5		15		25		35		45		55	
6		16		26		36		46		56	
7		17		27		37		47		57	
8		18		28		38		48		58	
9		19		29		39		49		59	
10		20		30		40		50		60	


System Status
Battery Information
Alarm Information
Photovoltaic Controller
Inverter Status
Charging Module
Single Over-Voltage Alarm 1
Single Over-Voltage Alarm 2
Single Under-Voltage Alarm 1
Single Under-Voltage Alarm 2
Single Over-Temperature Alarm 1
Single Over-Temperature Alarm 2
Single Under-Temperature Alarm 1
Single Under-Temperature Alarm 2
Low-SOC Alarm 1
Low-SOC Alarm 2
Charging Over-Current Alarm 1
Charging Over-Current Alarm 2
Discharging Over-Current Alarm 1
Discharging Over-Current Alarm 2
Low-Insulation Alarm 1
Low-Insulation Alarm 2
Charging Module Comm Alarm
Charging Module Hardware Fault
Inverter Module Comm Alarm
Inverter Module Hardware Fault


System Status
Battery Information
Alarm Information
Photovoltaic Controller
Inverter Status
Charging Module
Start Charge
Fast Charge
Uniform Charge
Floating Charge
End Charge
Electricity Generation
Day kWh
Month kWh
Total kWh
Service Data
Voltage V
Current A
Temperature ° C
Battery Low V
Battery High V
Device Low V
Device High V
Charging Over I
Device High T
Module Fault
Load Over I


System Status
Battery Information
Alarm Information
Photovoltaic Controller
Inverter Status
Charging Module
DC Voltage: V
A-phase Voltage: V
A-phase Current: A
B-phase Voltage: V
B-phase Current: A
C-phase Voltage: V
C-phase Current: A
Reservation of Start and Stop Time (24-hour system) :
Start Inverter Output: hour min
Stop Inverter Output: hour min
NO Order(0)/Order(1):
SAVE
Life Time:
Bypass Voltage:
Capacity:
Equipment Status:
START
STOP


System Status
Battery Information
Alarm Information
Photovoltaic Controller
Inverter Status
Charging Module
Moudle
Voltage (v)
Current (A)
Temperature (℃)
Status
Fault
1
2
3
4
5
6
7
8
9
10


Charging Interface
Parameter Settings
Charging Module
Inverter Status
Fault Logging
Floating V: V Floating I: A
Uniform V: V Uniform I: A
CHN (0) /ENG (1) :
Manual (0) /Auto (1) :
Sandi (0) /Bangzhao (1) :
Reservation of Charging Time (24-hour system) :
Start: hour min
END : hour min
RETURN
SAVE
1
2
3
4
5
6
7
8
9
0
CLEAR
OK