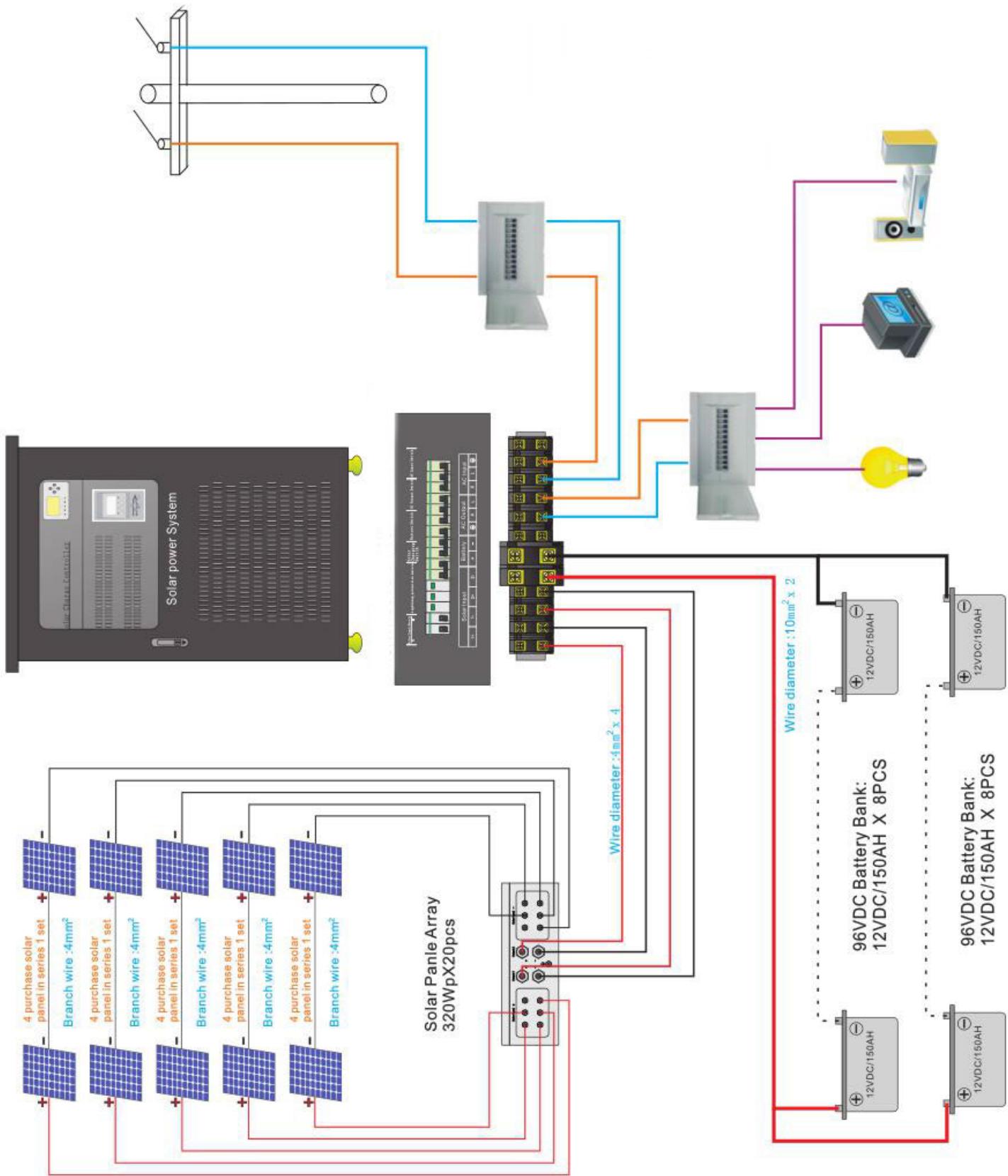


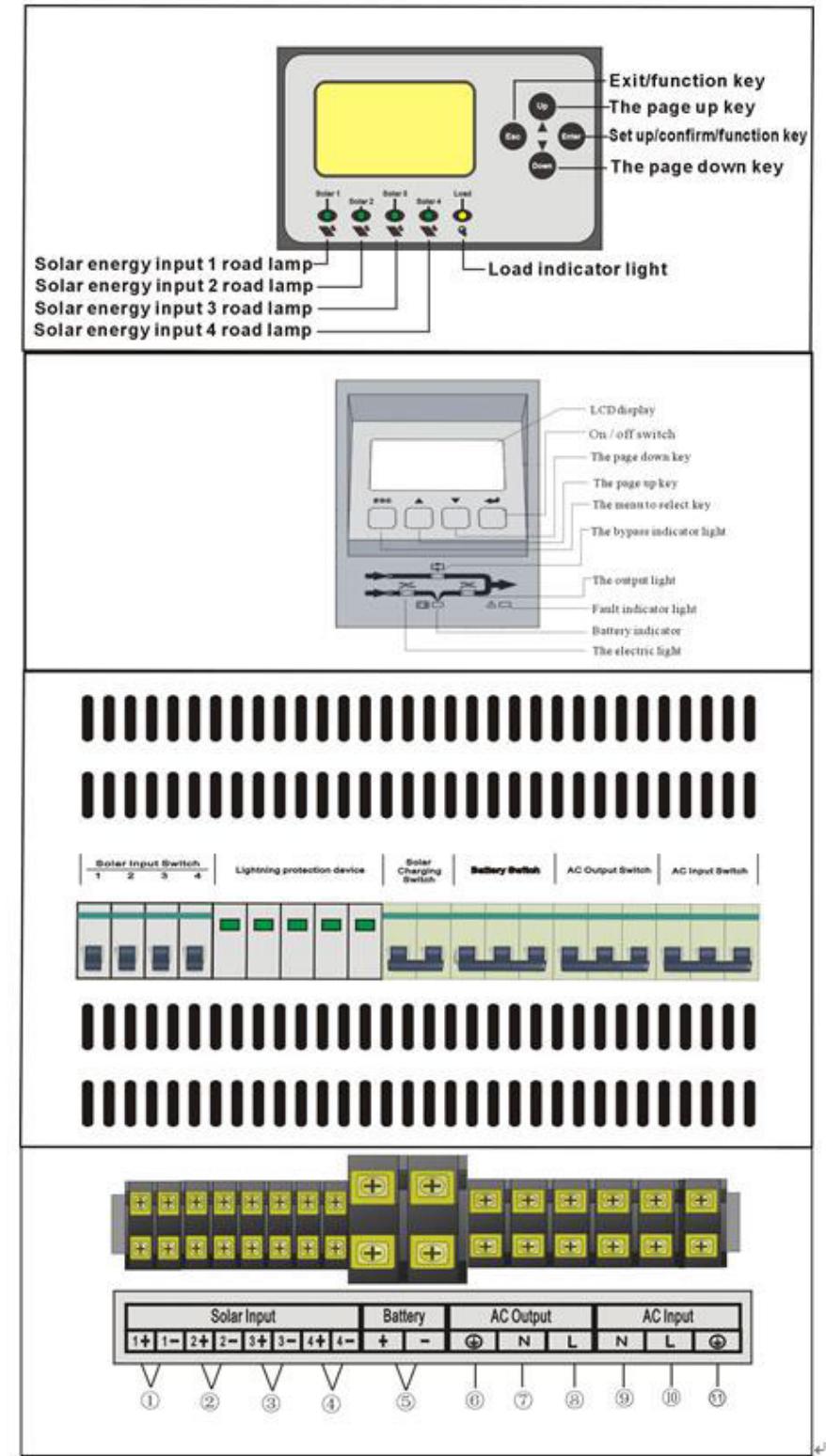
# 20KW Off Grid Solar Inverter User Manual



## Product Features

- Built in mppt solar charge controller;
- Pure sine wave AC output strong ability to take the load;
- LCD+LED display mode, clearly to know the operation status;
- Output over-load protection kinds of automatically protection and warning;
- Solar array and battery use the same positive system;
- Intelligent charge control programmable charger data setting can use in difference operate occasion;
- Battery protect data setting have password protect function;
- Calculate photovoltaic power generation function calculate battery power function;
- Complete protect: reverse battery protection, battery overcharge protection, internal chassis cooling control(more than 45°C the fan will turn on),battery anti-reverse charge at night time function and alarm function;
- Display : current battery voltage, battery charge current, internal chassis temperature, calculate photovoltaic power generation function, battery power function, calculate power consumption function, solar panel current for each strings etc.





"Inverter" orange light: Light said inverter output to normal;  
 "Failure" the red light: Light said inverter close inverter output or fault;  
 "Flip": Touch a conversion related interface to show the working condition of inverter;

① 1 way solar positive/negative input;	⑥ Output ground terminal;
Mains input zero;	
② 2 way solar positive/negative input;	⑦ Output zero;
③ 3 way solar positive/negative input;	⑧ Output R phase;
④ 4 way solar positive/negative input;	⑨ Output S phase;
⑤ Battery input the positive/negative terminals;	⑩ Output T phase;

## TECHNICAL DATA

Model		NKD-20KW
Rated Power		20KW
Battery	Rated Voltage	220VDC
	Voltage of over discharge protection	86VDC/172VDC /194VDC/345VDC
MPPT Controller	Rated Current	100A
	Rated voltage	220VDC
	Number of inputs	1/2
	Max. current of each input	100A
	Solar input voltage	192V PVmax:430VDC
	Voltage of overcharge protection	222VDC(programmable)
	Control accuracy	±0.1
	Display accuracy	±0.1
	Efficiency	>97%
Inverter	Input voltage	110VAC±20%/220VAC/240VAC±20%
	Input frequency	50Hz/60Hz±5%
	Output voltage	220VAC±2%
	Output frequency	50/60Hz±0.01%
	Output waveform	Pure sine wave, THD<4% (full load)
	Switching time from battery to mains	<30ms
	Overload	120% 20s; > 150%, 10ms
	Efficiency	≥90% (load power 100%)
	Dynamic Load Voltage Transients	<±5% (0-100%)
	Protection function	Output short circuit protection, over-voltage protection, under-voltage protection, low battery protection, etc.
Other	Automatic power on/off	Light-operated power-on+fixed-time power-off (programmable)
	Ambient temperature for operation	-10~40 °C
	Relative humidity for operation/storage	20-90% (no condensation, maximum)
Dimension(mm)		635*566*1295
Weight(kg)		257