



Solar Charge Controller (24V~600V / 30A~300A)

Zhejiang Sandi Electric Co.,ltd

———— www.lgis.cc ————

Company profile

Zhejiang Sandi Electric Co., Ltd is an international PV enterprise which is located in the "capital of China's electrical appliances" Wenzhou. Specialized in the new energy source and electrical source scientific research, development, manufacture and service had surpasses for 15 years.

Sandi company's products are widely applied in solar or wind energy, construction, industry, new energy source, civilian use, electric power, medical treatment, aviation, automatically control system of war industry and national heavy engineering project.

Main products: Solar off grid pure sine wave inverter, solar pump inverter, PV grid-connected inverter, PV array combiner box, solar charge controller, wind-solar hybrid controller, single phase to three phase converter and AC/DC Charger, etc products.

SANDI is recognized by widely customers according to entirely varieties, high quality and service first. The R&D and engineering technicians have multi-year experiences in product design, product implementation, engineering service and can manufacture the solar energy generation products with the international competition capability reaches advanced level in the world, our product have passed CE(EMC&LVD), SAA(AS4777&AS3100), G83/1, G59, VDE ARN 4105 and EN62109, EN61000 certification and approved by international standard.

SANDI Electric Company insist on technology as forerunner, keep long-term, good research cooperation with all universities; fetch in and absorb international advanced technology, built strictly quality control system.

We will take the work objective of “unremitting exploration, endeavor and innovation, honesty and dedication, perfect and practicality” and quality guideline of “criterion management, intensive manufacture, quality first, service with all hearts”. Seek excellence, value innovation!

We will ceaselessly struggle and create refulgence with you together.





Solar Charge Controller

Qualification certificate



Product Introduction

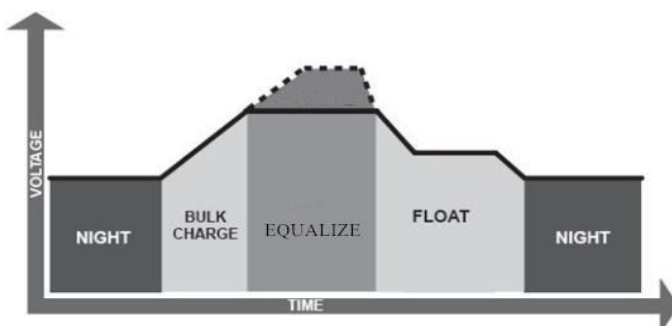
The SANDI PV charge controller adopts advanced digital control technology, LCD display and automatically operation. With the features of Pulse Width Modulation (PWM) battery charging and unique control technology, the PV charge controller improves battery life efficiently. The PV charge controller is only suitable for controlling solar modules. Never connect any other type of charging source to the charge controller. This can destroy the controller and/or the charging source.

To meet different power stations' need, there are 24V、48V、96V、120V、192V、220V、240V、360V、384V、480V、492V and 600V other normal series voltage level base on different battery voltage of off-grid PV power station system project.

Product Feature:

1. Excellent EMC design
2. Industrial-grade chip
3. Full enclosed duct design and high speed fan for cooling
4. Users can parallel connect lots of our controllers in a system
5. Infineon IGBT module or IR MOSFET ensures stable performance
6. New SOC method indicates the power generation information of daily, monthly and total
7. 3"LCD+LED display+touching keys as HMI makes the operation more easy
8. PWM Charging technology: fast charging, equalize charging and float charging
9. Advanced battery activation technology increases battery lifetime 30% at least and improves the system performance
10. Temperature compensation function compensates the voltage based on different temperature
11. RTC function indicates the real time and temperature
12. The second protection will protect battery from destroying when the power switch (IGBT) is down (optional function)
13. DC output function (Optional function)
14. Standard Modbus protocol for RS485 or GPRS communication.

PWM Charging Diagram



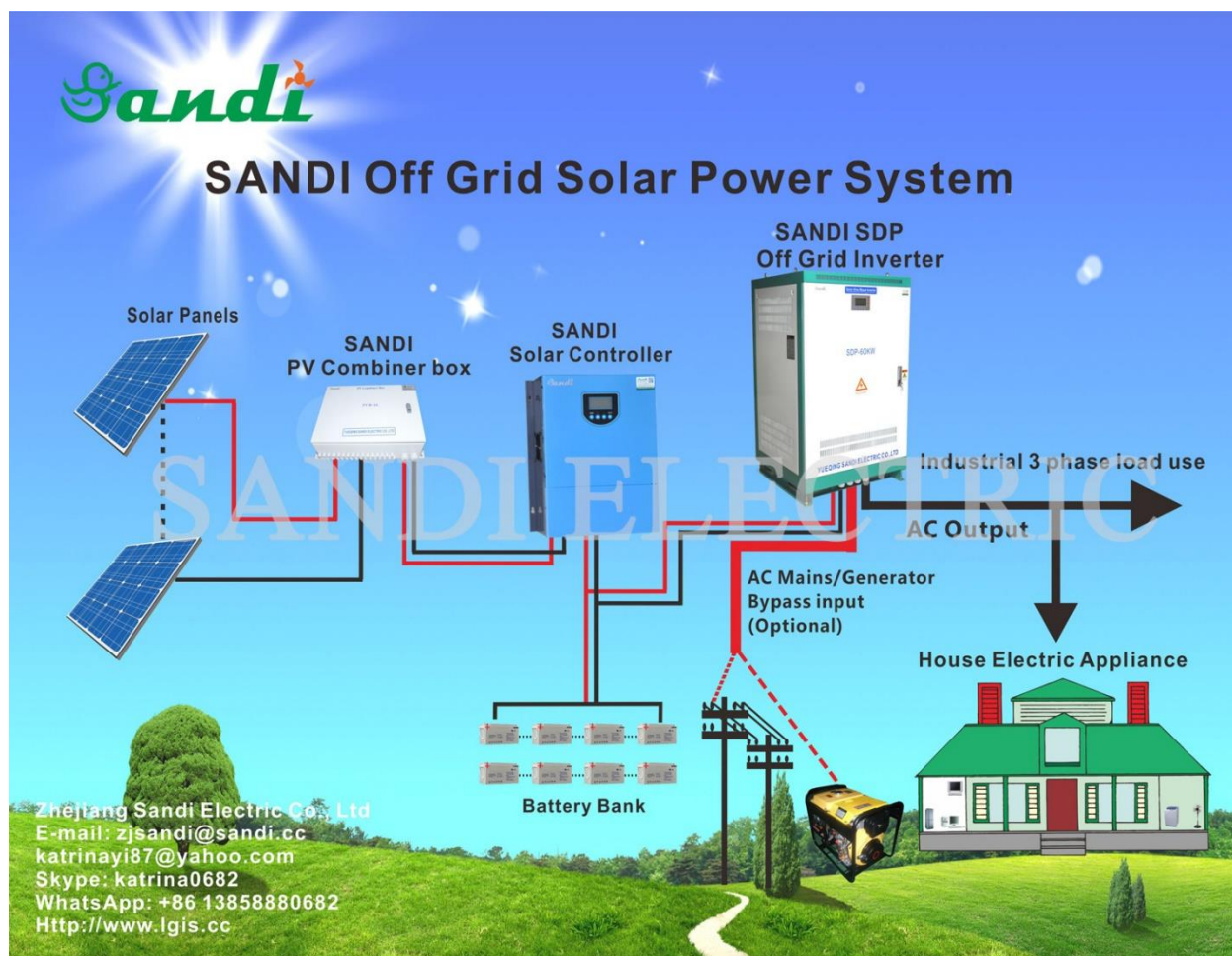
High efficiency PWM charging technology which has three charging stages (Bulk charging, equalize charging and float charging), and improves battery storage efficiency and charging efficiency.

Advanced battery activation technology which increases battery lifetime 30% at least and improves the system performance.

PV Off-grid Solar Power System

PV Off-grid solar power generation system including solar panel array, solar charge controller, storage battery, Off-grid inverter, PV combiner box and etc. In the sunshine, the solar panel convert the solar energy to DC power and charge the battery group by the charge controller. Then the off grid inverter convert the DC power into AC power for power supply the AC load.

System Schematic



The PV charge controller is a smart device which designed for off-grid PV power system. It has great running performance with LCD display and convenient operation. The controller also automatically control cell cut or connect ordinarily according to the change of battery voltage.

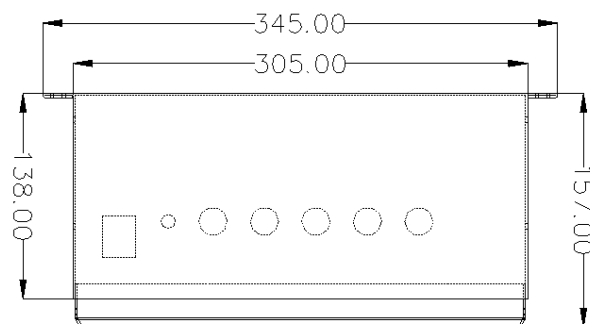
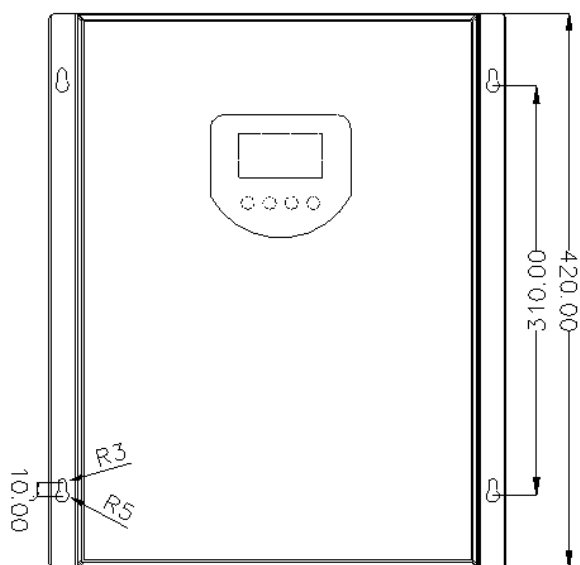
The charge controller is very important for solar power system, the performance will affect the life of system directly, especially the battery life. Anyway, the battery's life will be shorted when battery being charged or discharged. The SANDI series PV charge controller adopts PWM charge model which can improve battery life greatly.

Product Show



30A~150A controller is wall-mounted

Product dimension



Unit: mm

Technical Parameter

Wall-mounted for 24V~600V / 30A~150A

Battery group system voltage	24V	48V	96V	192V	240V	360V	480V	540V	600V
PV Max. input open circuit voltage	100V	100V	200V	350V	450V	700V	950V	1000V	1000V
Rated charging current	□30A □50A □60A □80A □100A □120A □150A								
Number of PV input string	1 group (Optional 2 group)								
Equalize charging voltage	28.8V	57.6V	115.2V	230.4V	288V	432V	576V	648V	720V
Equalize charging recovery voltage	26.4V	52.8V	105.6V	211.2V	264V	396V	528V	594V	660V
Equalize charging time	120 minutes								
Float charging voltage	27.6V	55.2V	110.4V	220.8V	276V	414V	552V	621V	690V
Over voltage disconnect	32V	64V	128V	256V	320V	480V	640V	720V	800V
Over voltage reconnect	30V	60V	120V	240V	300V	450V	600V	675V	750V
No-load loss	<0.5W								
Environment temperature	-25°C ~ 55°C								
Terminal type	TC series barrier terminal								
Elevation	≤4000M, it should reduce power if the elevation high than 4000M								
Humidity	0 ~ 98%, Non-condensing								
Protection level	IP32								
Display	3'' LCD(White backlight)								
Display language	English								
Indicator light	Error indicator/Charging indicator								
Noise	< 30dBA								
Cooling method	Fan + heat sink								
Dimension	420*345*157mm								
Net Weight	10KG								
Package size	540x470x280mm								
Gross weight	12KG								
Package information	Hard box with pearl sponge								
Optional function	DC output, RS485, GPRS								

Remark: "Equalize voltage", "Equalize recovery voltage", "Equalize charging time", "Float voltage", "High voltage disconnect", "High voltage reconnect" are default setting, users can adjust them according to different requirement.



Our company can adjust parameter configuration according to user's requirement.

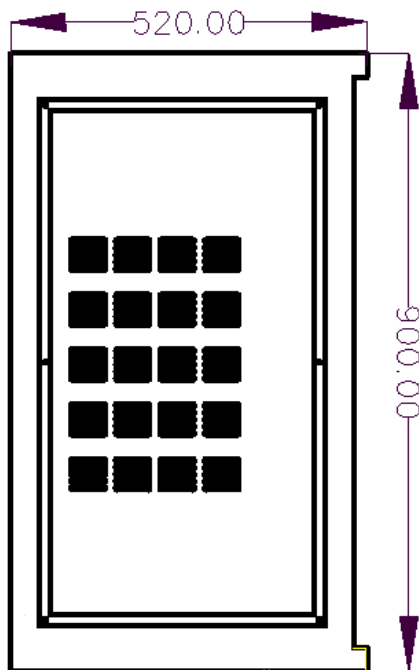
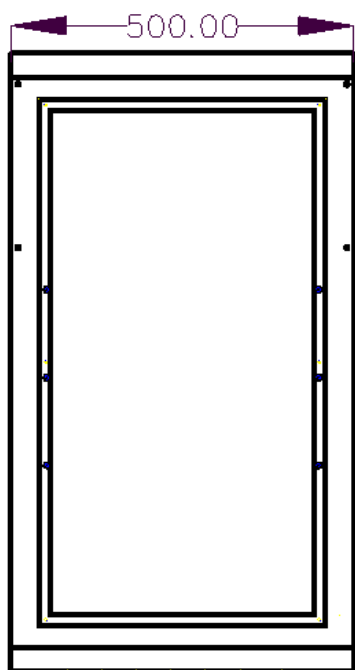


Product Show



150A~300A floor-type mounted

Product dimension



Technical Parameter

24V~600V / 150A~300A

Battery group system voltage	24V	48V	96V	192V	240V	360V	480V	540V	600V
PV Max. input open circuit voltage	100V	100V	200V	350V	450V	700V	950V	1000V	1000V
Rated charging current	□150A □200A □250A □300A								
Number of PV input string	150A/3 strings, 200A/4 strings, 250A/ 4 or 5 strings, 300A/5 or 6 strings								
Equalize charging voltage	28.8V	57.6V	115.2V	230.4V	288V	432V	576V	648V	720V
Equalize charging recovery voltage	26.4V	52.8V	105.6V	211.2V	264V	396V	528V	594V	660V
Equalize charging time	120 minutes								
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No-load loss	<0.5W								
Environment temperature	-25°C ~ 55°C								
Terminal type	TC series barrier terminal								
Elevation	≤4000M, it should reduce power if the elevation high than 4000M								
Humidity	0 ~ 98%, Non-condensing								
Protection level	IP32								
Display	3'' LCD(White backlight)								
Display language	English								
Indicator light	Error indicator/Charging indicator								
Noise	< 30dBA								
Cooling method	Fan + heat sink								
Dimension	420*345*157mm								
Net Weight	10KG								
Package size	540x470x280mm								
Gross weight	12KG								
Package information	Standard export wooden box								
Optional function	DC output, RS485, GPRS								

Remark: "Equalize voltage", "Equalize recovery voltage", "Equalize charging time", "Float voltage", "High voltage disconnect", "High voltage reconnect" are default setting, users can adjust them according to different requirement.



Our company can adjust parameter configuration according to user's requirement.



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