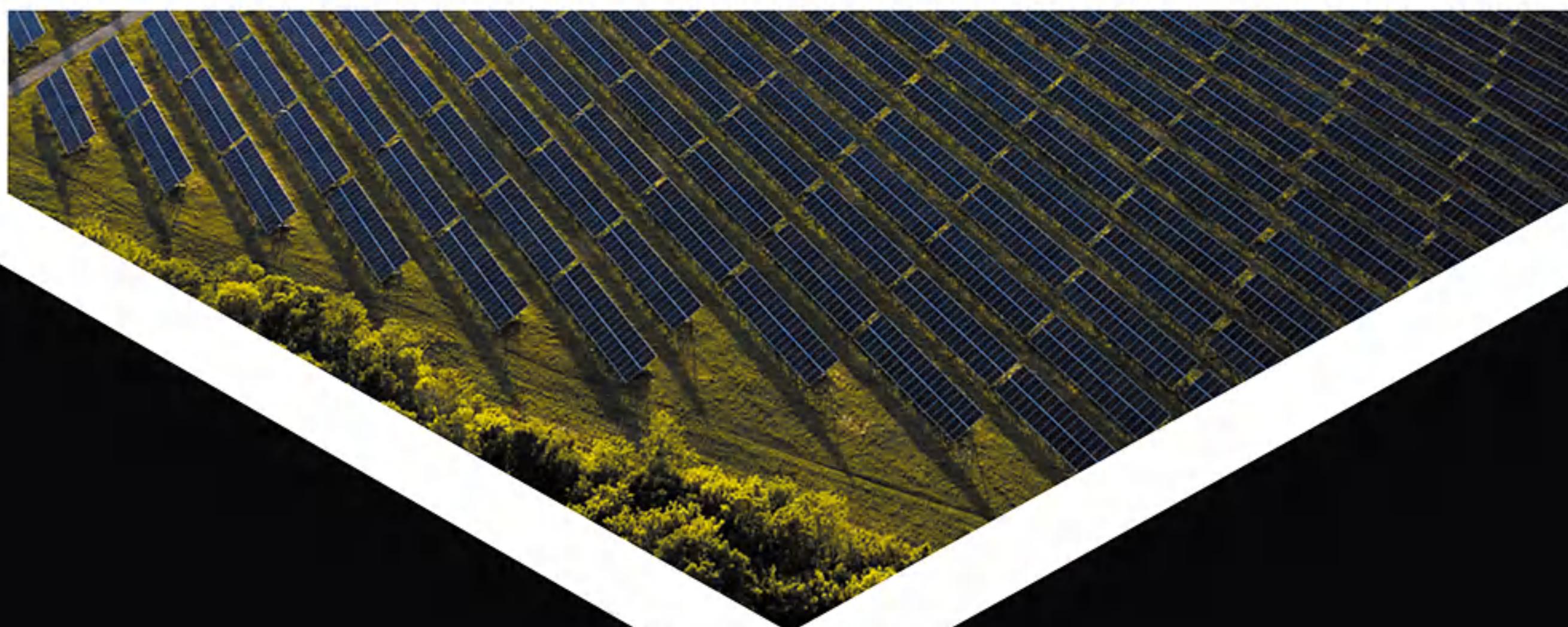




Company Products Catalogue

Solar System / Solar Panel / Inverter / Controller / Battery



All in one package, more cost effective, free design, easy to install and ship.

www.sunwaypv.com



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Professional

We founded in 2002, 500MW solar panel production capacity , millions of battery, charge controller and inverter production capacity

Service

Our mission is to provide best service to our customers and concentrate on building a long-term partnership

Certification

Our Products are certified by TUV(Germany) , ETL(America) ,CE

Delivery

Products are exported to more than 150 countries and delivery fast

OUR ADVANTAGES

Building up the global sales network organization to ensure convenient and best products and service for our customers

OUR COMPANY

Sunway Group is an international, diversified, comprehensive growing group company committed to provide Household Appliances, Foodstuffs, Medical Disposable products and PV Power Generation Systems globally.

Sunway Solar as a subsidiary of Sunway Group, was founded in 2002, specializing in R&D , manufacturing and marketing solar cells, modules and designing PV power generation systems "Your Professional PV Supplier". Sunway Solar has adopted

international advanced production equipment from Japan and Germany, also integrated the first class manufacturing engineering & management system and dedicated to provide high performance solar modules with competitive cost.

Sunway Solar is greatly appreciated in USA, Egypt, Ghana, Sri Lanka, Sudan, Australia, the Middle East and South America, etc. Sunway Solar plans to increase the capacity of the PV cells up to 300MW within three years, through the localizing operation, and builds up the global sales network organization to ensure convenience and best products and service for our customers.





OUR TEAM

Professional • Solidarity • Principled

We established a very professional team. Each of our colleague can provide you best service. If you have any question please contact us.

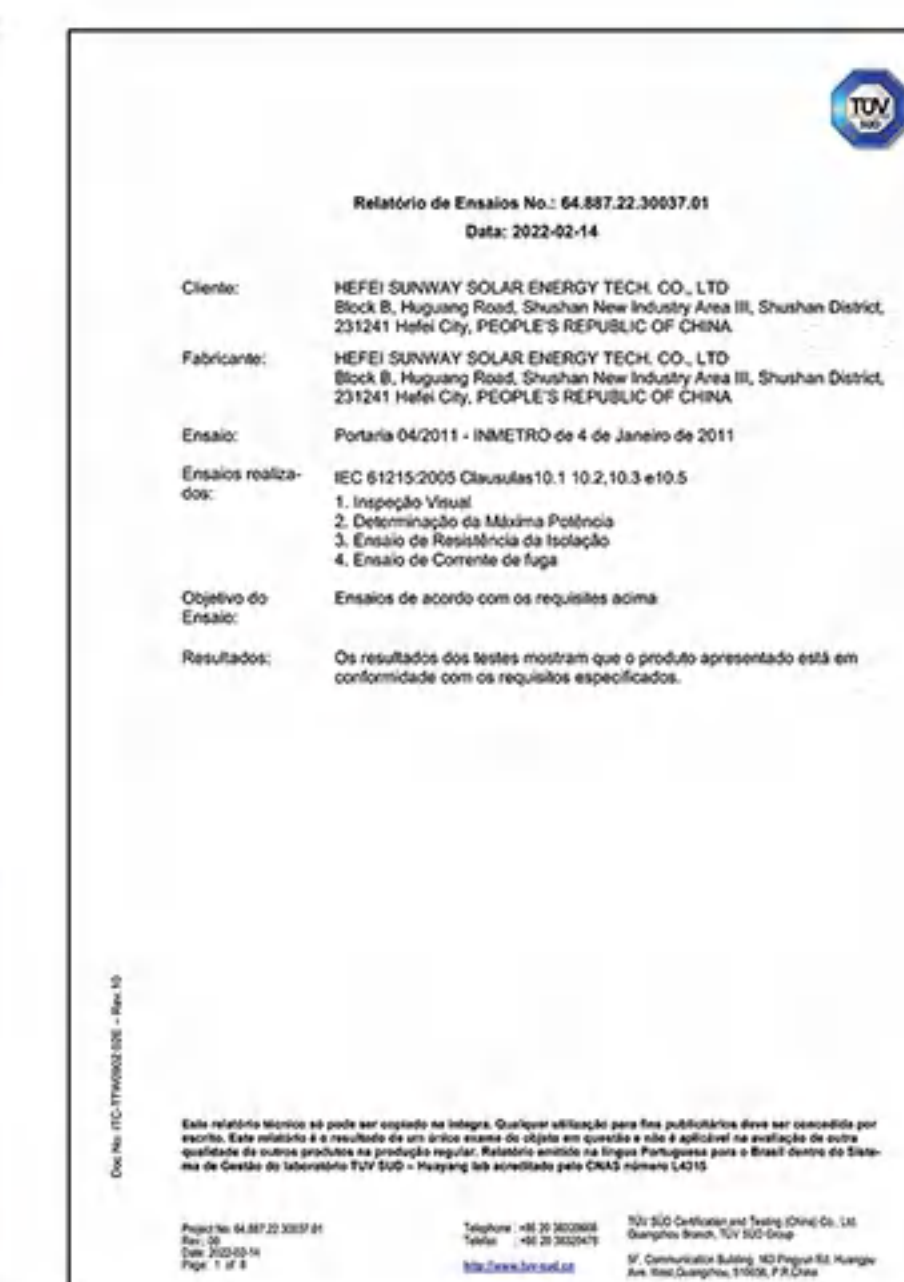
Our team adheres to the principle of good faith, standard and high efficiency, obtains the reputation by the high quality service, and wholeheartedly provides the high quality solution for the general customers.

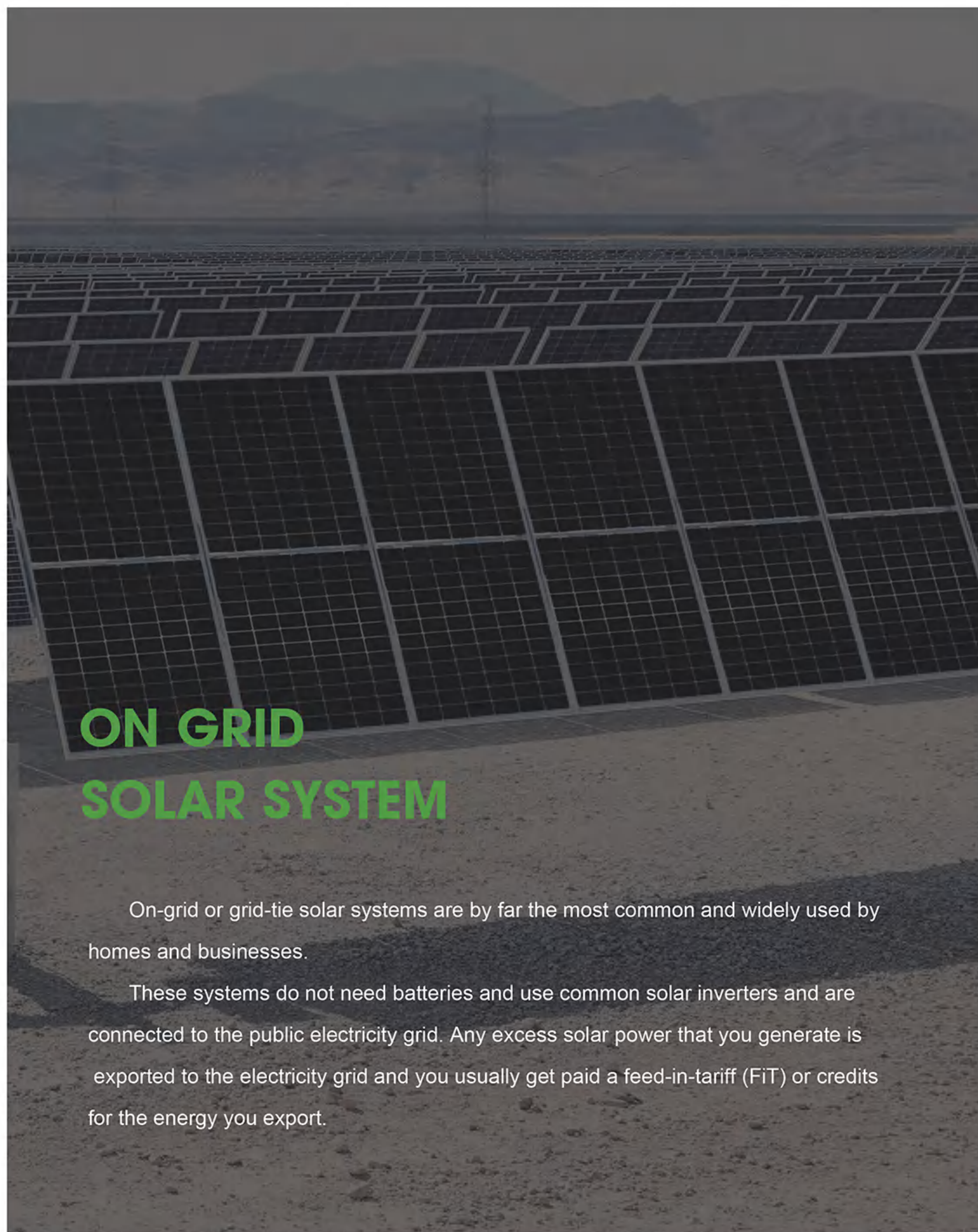
CERTIFICATIONS



Our PV solutions and complete range of products, On grid, Off-grid, Hybrid. Include a wide variety of internal components and hardware that comply with global industry standards. We offer multiple certificates for all components in our product line that follow local standards and codes required for your specific regions or markets.

This ensures safe installations and promotes optimal photovoltaic practices.





ON GRID SOLAR SYSTEM

On-grid or grid-tie solar systems are by far the most common and widely used by homes and businesses.

These systems do not need batteries and use common solar inverters and are connected to the public electricity grid. Any excess solar power that you generate is exported to the electricity grid and you usually get paid a feed-in-tariff (FiT) or credits for the energy you export.

SYSTEM COMPONENTS



01 Solar Panel

Mono/poly/half
cell/flexible/full
black solar panel



02 Solar Inverter

On grid solar
inverter



03 PV Cable

Has excellent acid
resistance and heat
resistance



04 MC4 Connector

Contact material is
copper and tin plated



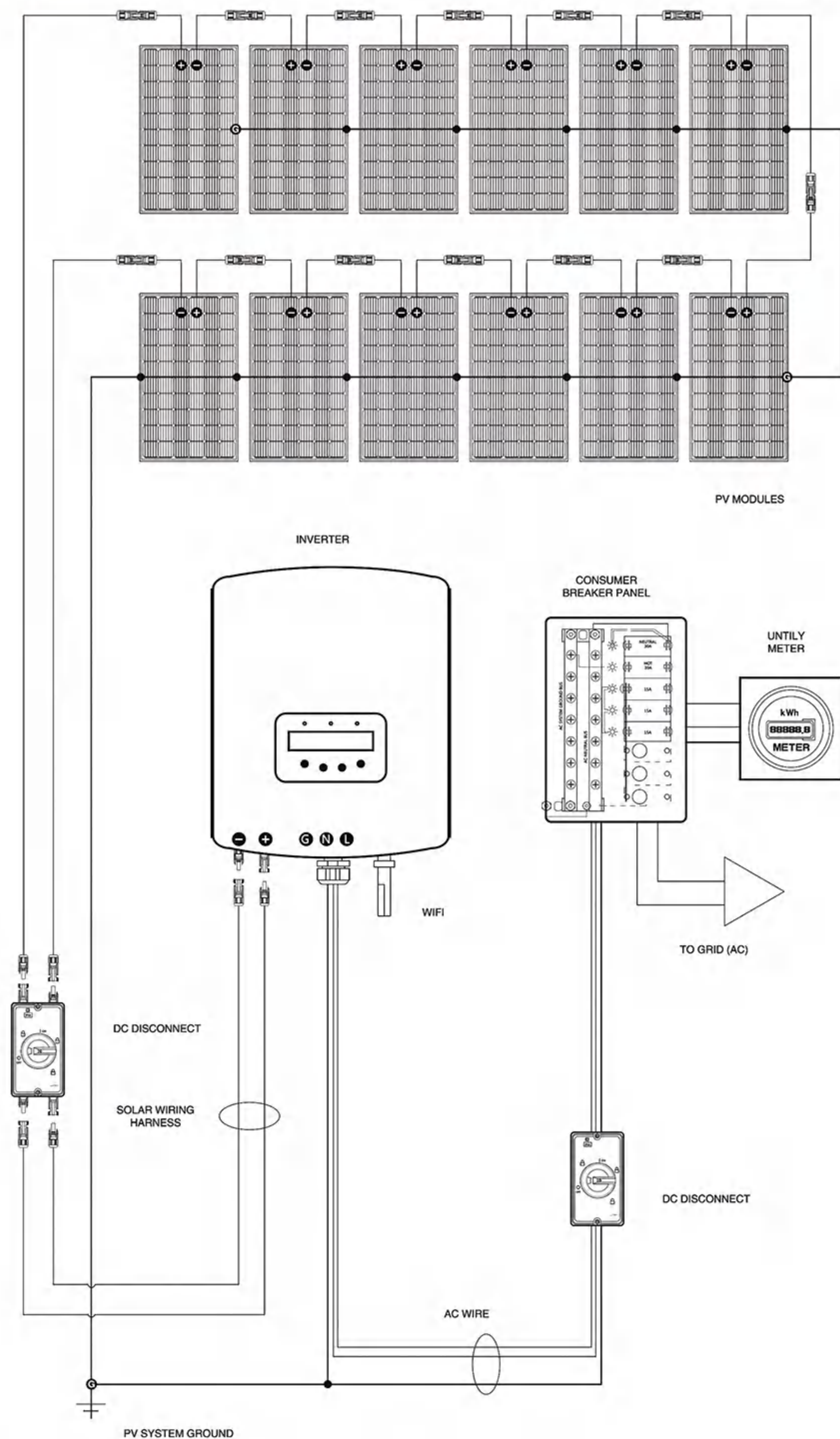
Configuration of PV System

- Solar Panel
- Roof/Ground Mounting System
- DC/AC Combiner Box
- On Grid Inverter
- DC/AC Cables
- PV Installation Tools

Main Advantages

- Reducing electricity bills
- Easy to installation and maintenance
- Effective utilization of generated power





PROJECT CASES



OFF GRID SOLAR SYSTEM

Off-grid solar systems operate from the stored energy in a battery bank. Solar panels are used to keep the battery bank charged. Your off-grid solar system has to be sized properly to meet your daily power needs and replace the stored energy pulled from the battery bank.

The high cost of batteries and inverters means off-grid systems are much more expensive than on-grid systems and so are usually only needed in more remote areas that are far from the electricity grid. However battery costs are reducing rapidly, so there is now a growing market for off-grid solar battery systems in both cities and towns.



Configuration of PV System

- Solar Panel
- Roof/Ground Mounting System
- DC/AC Combiner Box
- Off Grid Inverter Built in Controller
- Battery Bank, Cable & Rack
- DC/AC Cables
- PV Installation Tools

Main Advantages

- Reducing electricity bills
- Easy to installation and maintenance
- Effective utilization of generated power



SYSTEM COMPONENTS



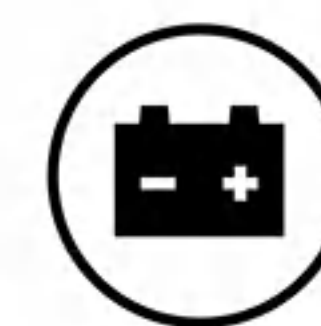
01 Solar Panel

Mono/poly/half cell/flexible/full black solar panel



02 Solar Inverter

Off grid solar inverter



03 Battery Bank

Lithium Battery/GEL Battery



04 Solar Controller

MPPT/PWM Controller



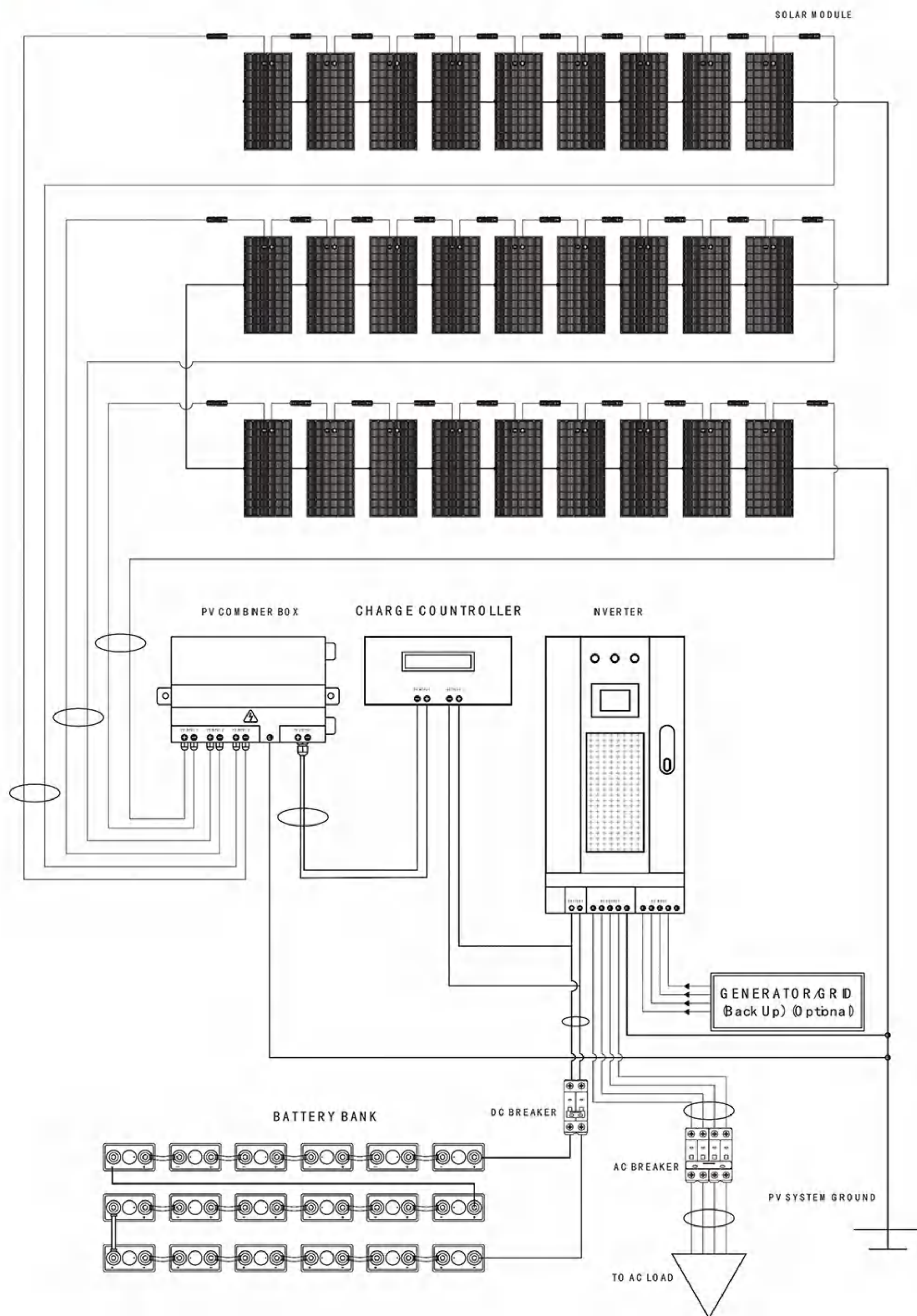
05 PV Cable

Has excellent acid resistance and heat resistance



06 MC4 Connector

Contact material is copper and tin plated



PROJECT CASES



HYBRID SOLAR SYATEM

Sunway Hybrid Solar Energy Kits combine the innovation of both on-grid(grid-tied) and off-grid technologies and are offered as on grid(grid-tie) solar with battery bank storage. Sunway Hybrid Solar Energy Kits generate electricity, not only can be used, also can be stored for night use .What is more, extra energy can be sold back to utility company. This is perfect for home owners. Although for the majority of businesses which operate during the daylight hours, a common hybrid solar system is still the most economical choice.



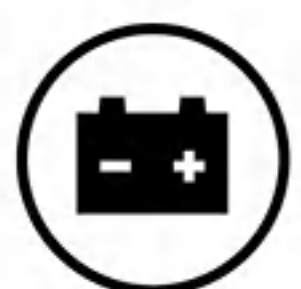
01 Solar Panel

Mono/poly/half cell/flexible/full black solar panel



02 Solar Inverter

Hybrid solar inverter



03 Battery Bank

Lithium Battery/GEL Battery



04 Solar Controller

MPPT/PWM Controller



05 PV Cable

Has excellent acid resistance and heat resistance



06 MC4 Connector

Contact material is copper and tin plated



COMPONENTS OF THE SYSTEM



✓ Configuration of PV System

- Solar Panel
- Roof/Ground Mounting System
- DC/AC Combiner Box
- Hybrid Inverter/Charge Controller
- Battery Bank, Cable & Rack
- DC/AC Cables
- PV Installation Tools

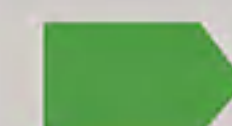
✓ Main Advantages

- Operate with on-grid and off grid mode at the same time
- Sell energy back to the utility company and store excess energy to night use
- Use on grid energy or solar energy to charge the battery bank

SYSTEM DISPLAY



Our Hybrid Solar systems can seamlessly adjust to fluctuations in energy from both the utility and the solar array maximizing the energy storage and consumption. Users can decide when and how many energy is be stored and sold back to the utility company.



SEVERAL DIFFERENT HYBRID SYSTEMS



3-6KW



3-6KW



5KW



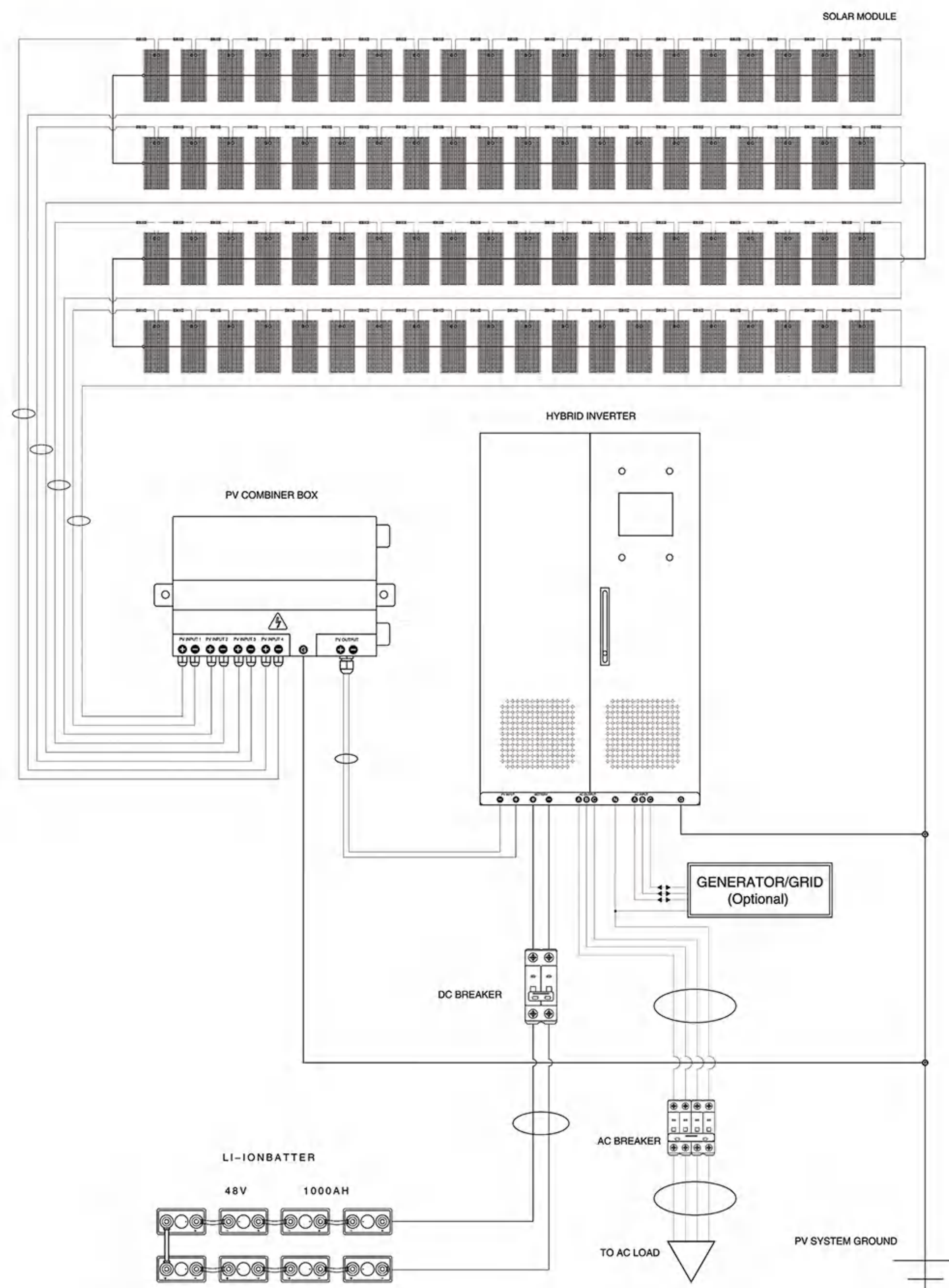
5-10KW



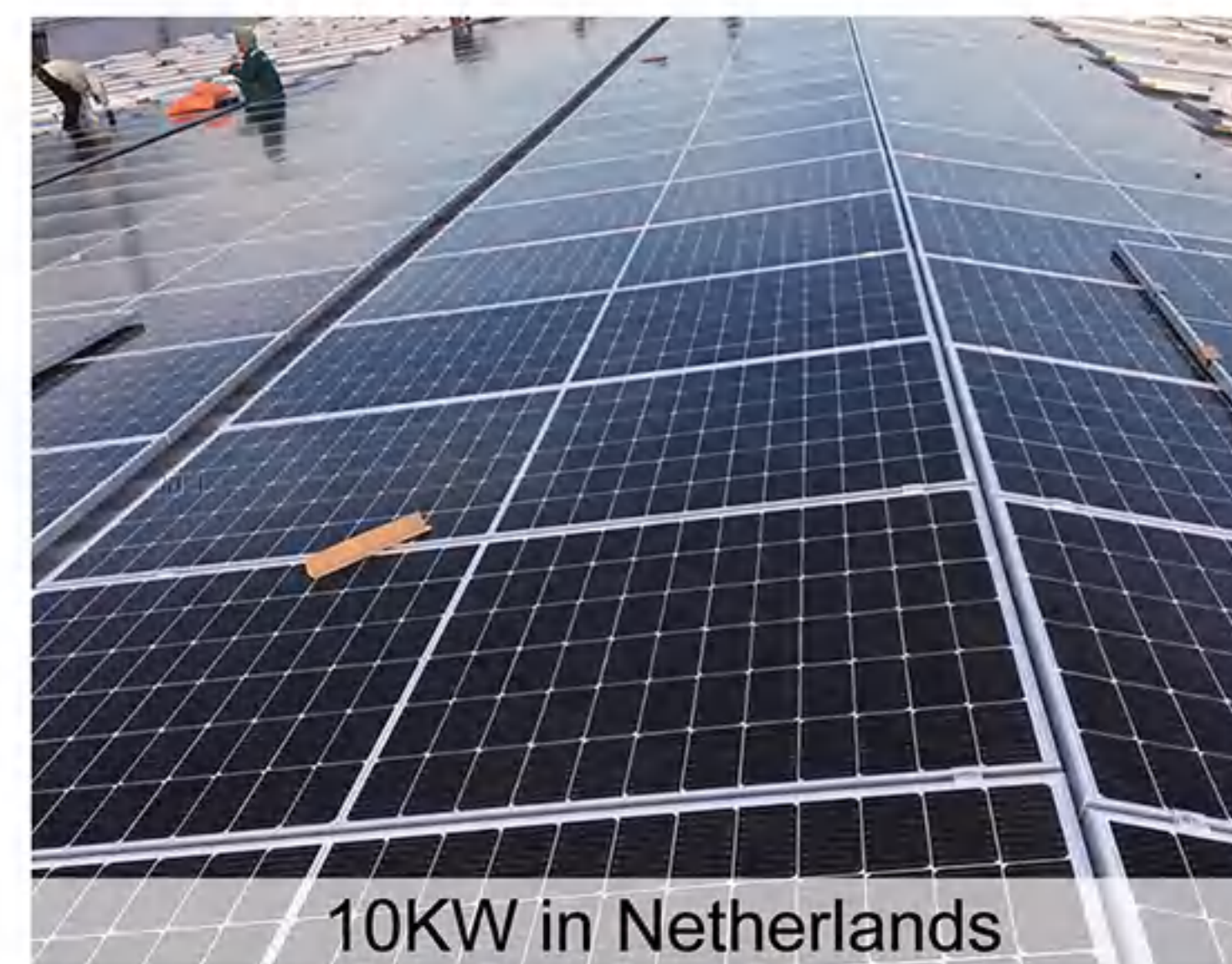
8-12KW



8KW



PROJECT CASES



10KW in Netherlands



5KW in Turkey



20KW in Brazil



4KW in Bangladesh

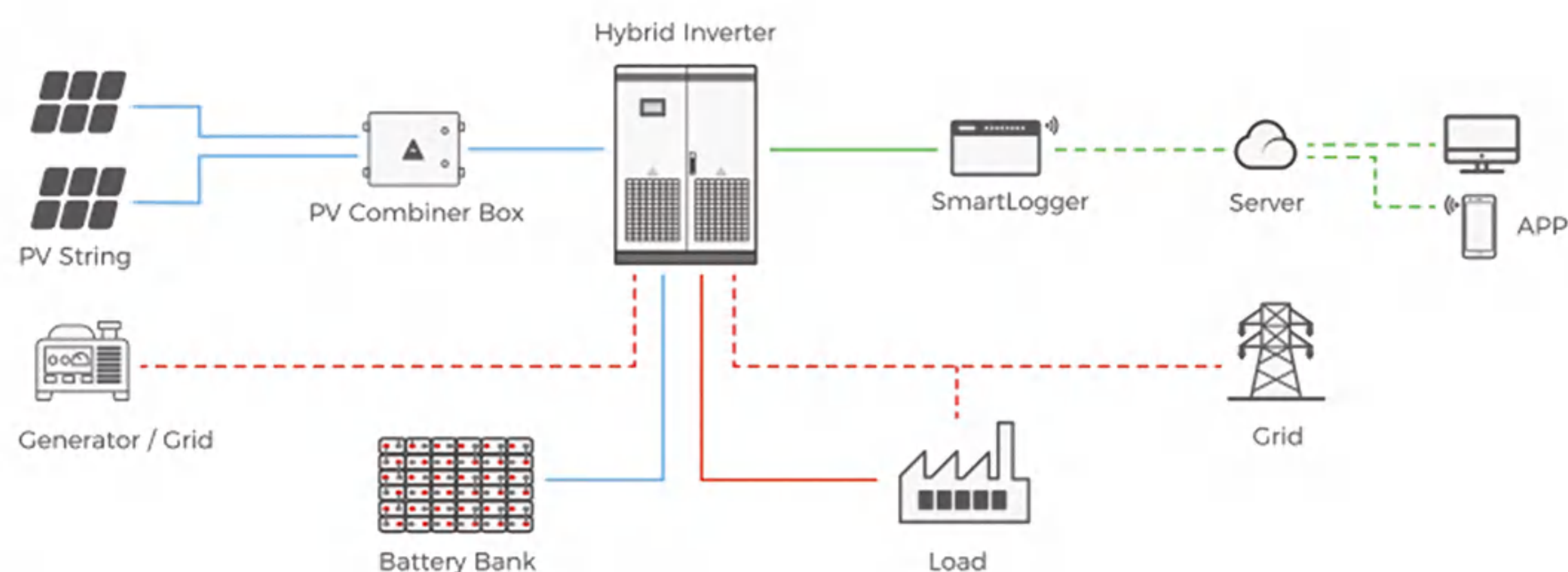


5MW in Afghanistan

SOLAR ENERGY STORAGE SYSTEM >>>

Hybrid solar energy storage system, the use of solar panels, power generation, storing electrical energy into the battery, through the inverter in the storage battery DC into household alternating current (AC), can according to the power demand of the average family configuration design, suitable for remote mountainous area electricity is not convenient, simple operation, plug and play, low failure rate, energy conservation, environmental protection, no pollution, no noise.

SOLAR ENERGY STORAGE SYSTEM WORKING DIAGRAM



✓ Configuration of System

- Mono/Poly/Half Cell Solar Panel
- DC/AC Combiner Box
- Lithium Battery
- PV Installation Tools
- Roof/Ground Mounting System
- Hybrid Inverter/Charge Controller
- DC/AC Cables
- DC Switches



30-100KW



30-150KW



- ☑ Pure sine wave AC output
- ☑ MPPT solar charge controller to maximize the solar output
- ☑ WIFI/GPRS remote monitoring(optional)
- ☑ Compatible to mains voltage or generator power
- ☑ Parallel operation available
- ☑ Configurable AC solar input priority via LCD setting

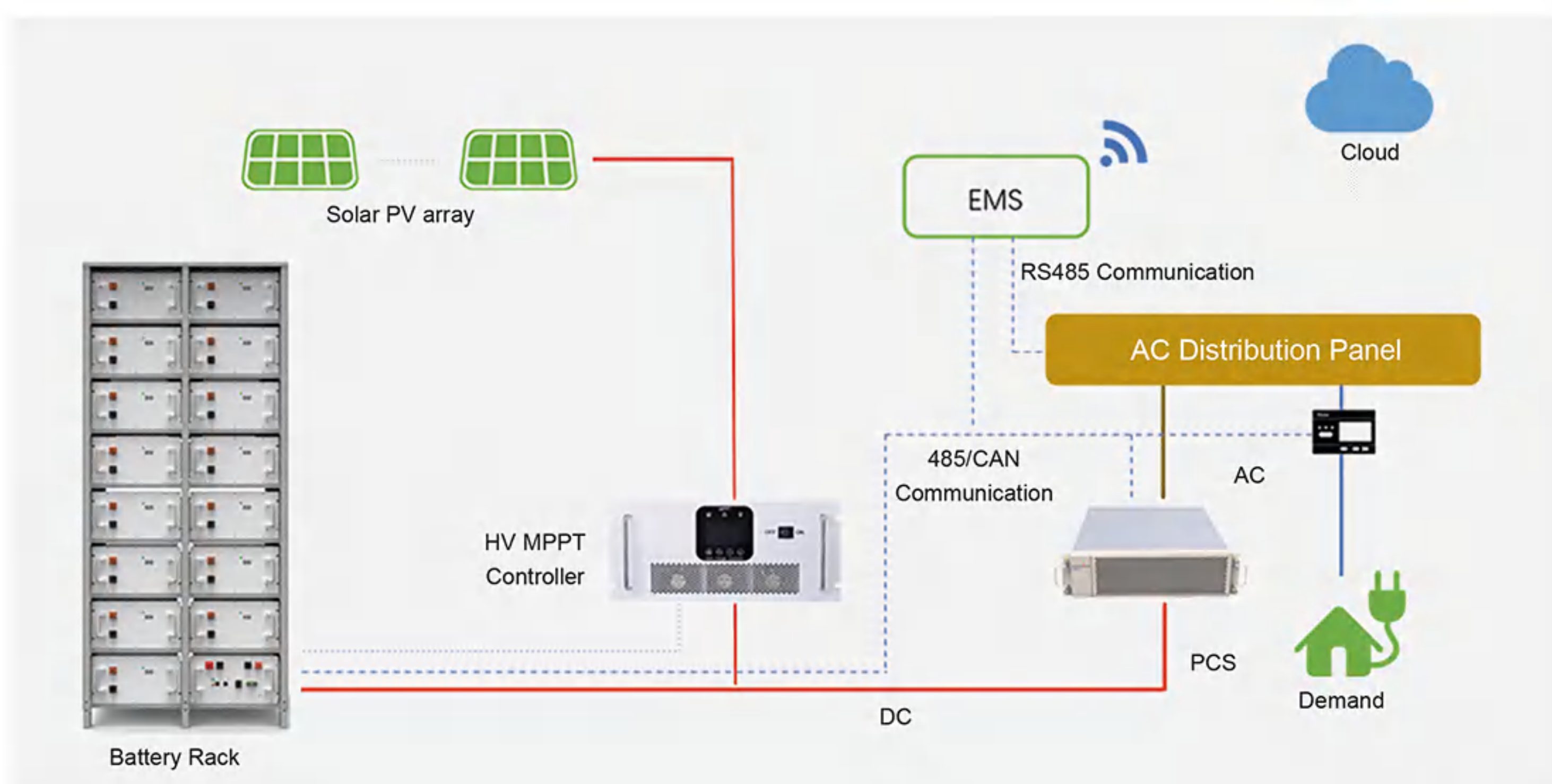


INTEGRATED SYSTEM CABINET



- The integrated system cabinet design of on-grid and off-grid supports a maximum of eight parallel units on the power grid
- 10KW/30KW/60KW/120KW, 1h to 3h energy storage capacity of the lithium iron phosphate for options
- PV DC networking, improve PV power generation efficiency by 5-8%
- Cabinet level and pack level fire protection, system thermal out of control detection and active fire protection
- Cabinet thermal insulation and hot and cold air conditioning thermal management, stable operation -20°C to 50°C

INTEGRATED SYSTEM CABINET WORKING DIAGRAM



CABINET DETAILS DISPLAY



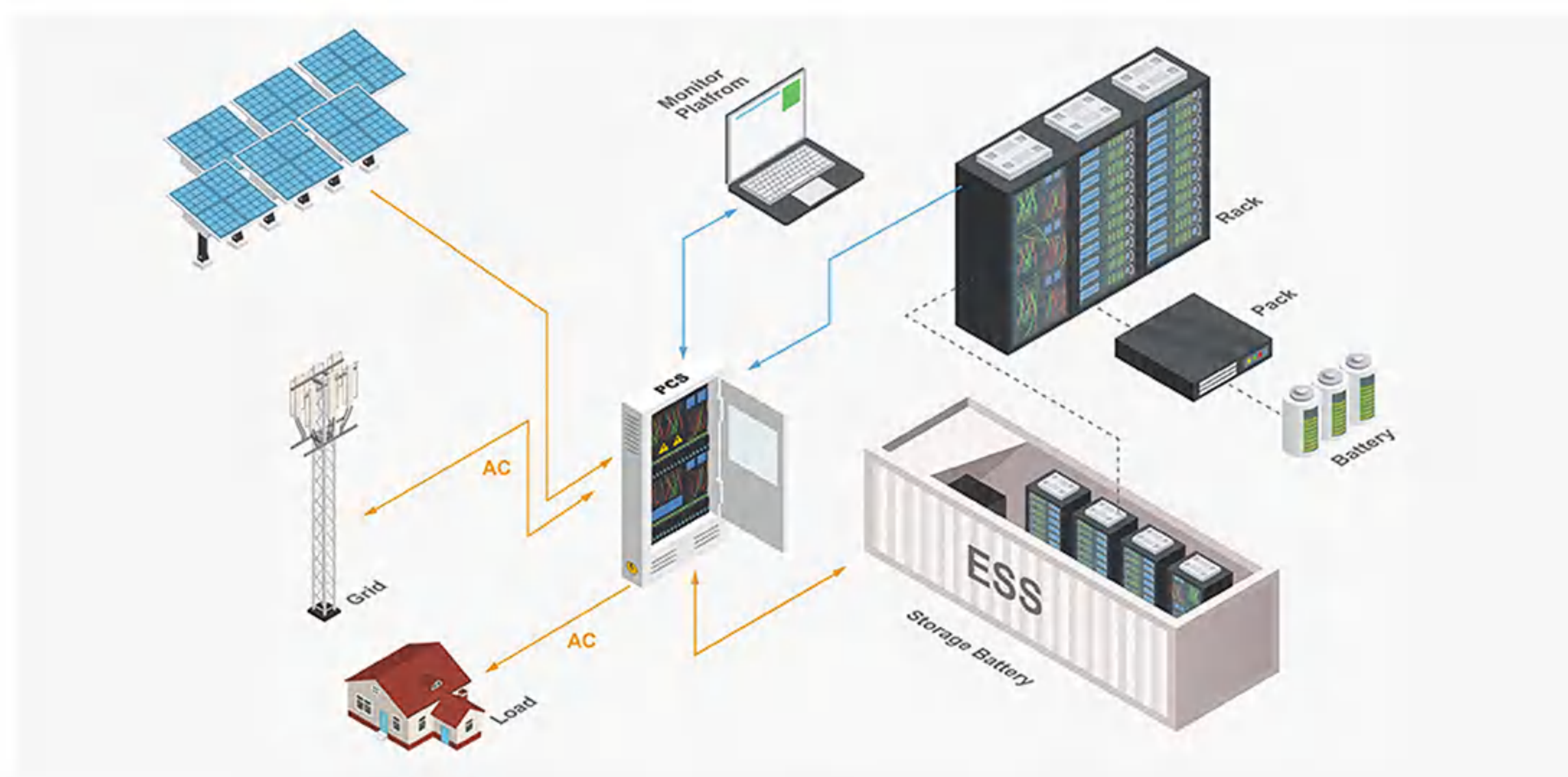
APPLICATIONS



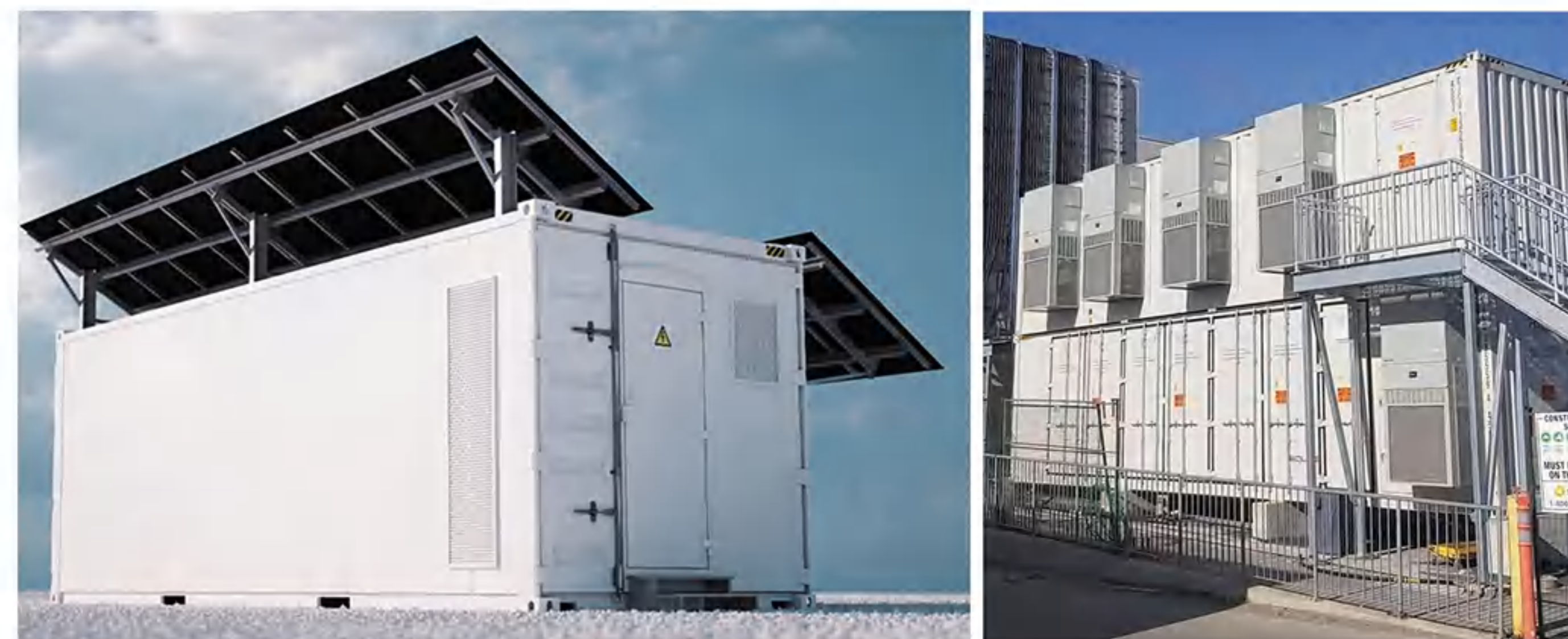


CONTAINER ENERGY STORAGE SYSTEM

Sunway battery energy storage system (BESS) containers are based on a modular design. They can be configured to match the required power and capacity requirements of client's application. Our containerised energy storage system (BESS) is the perfect solution for large-scale energy storage projects. The energy storage containers can be used in the integration of various storage technologies and for different purposes.



APPLICATION



HALF CELL SOLAR PANEL

The internal structure design of half - piece components includes three ways: series structure, series - parallel structure and parallel - series structure.



01 High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation

02 High power

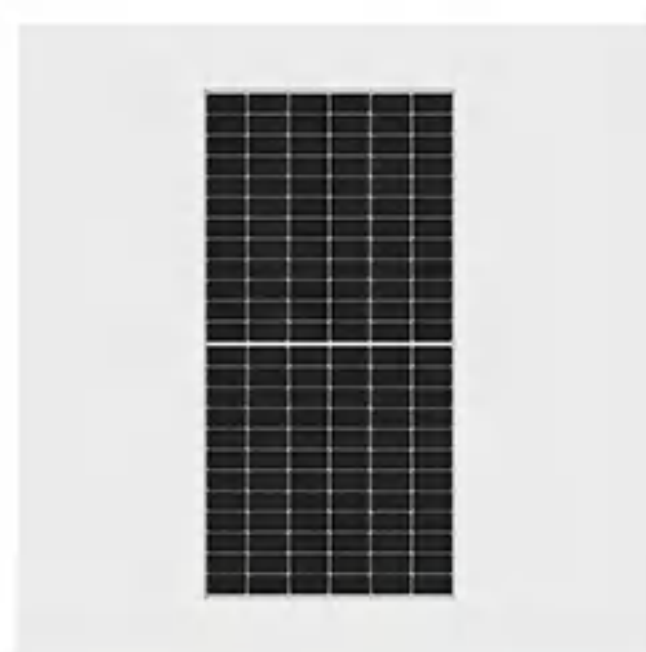
- High module efficiency with high density interconnect technology

03 High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology

04 High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications



GLASS

- Anti-reflective glass
- High-transmittance and low reflection
- Increase model efficiency
- High mechanical strength



CELL

- High PID resistant
- Low breakage rate
- Uniform color
- High Efficiency PV Cells



FRAME

- Optional silvery or black frame
- Tensile Strength Frame
- Boost bearing capability and prolong service life



JUNCTION BOX

- Waterproofness Junction Box
- IP67 protection level
- Quality diode ensures module running safety
- Heat dissipation

PRODUCT DISPLAY

120 Cells / 132Cells/144 Cells / 156Cells



120 Cells 210mm

MAX 605W

Weight: 31.5kg

Power Warranty: 30 Years

Max Efficiency: 21.40%

Size:2172*1303*30mm



132 Cells 210mm

MAX 670W

Weight: 34.5kg

Power Warranty: 30 Years

Max Efficiency: 21.60%

Size:2384*1303*35mm



120 Cells 166mm

MAX 375W

Weight: 19.8kg

Power Warranty: 25 Years

Max Efficiency: 20.27%

Size:1755*1038*35mm



144 Cells 166mm

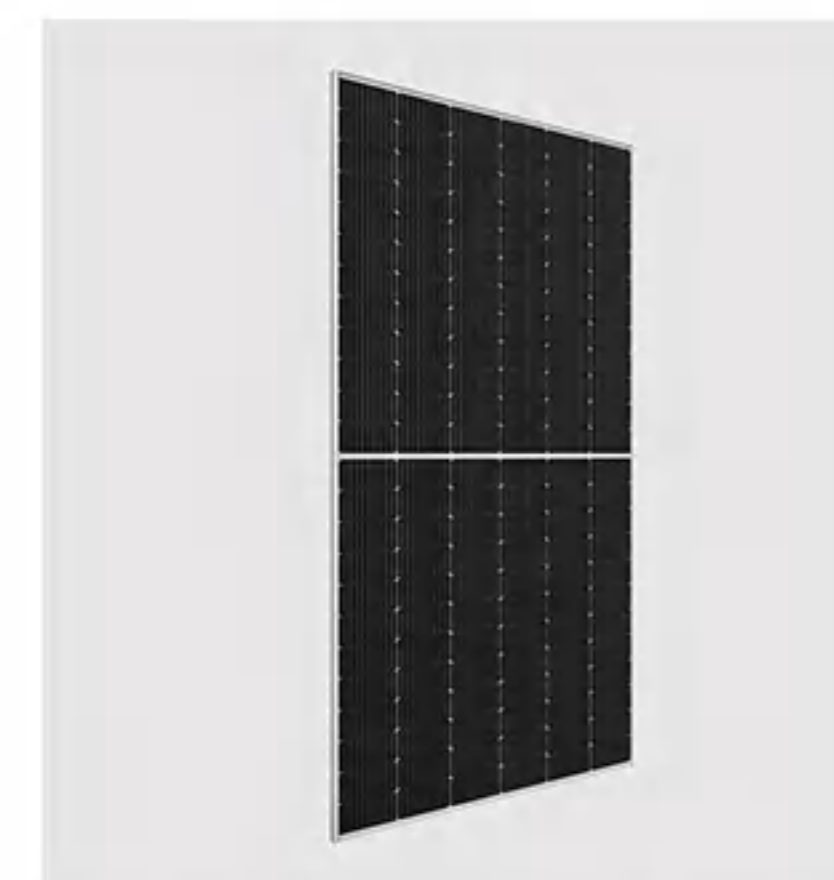
MAX 480W

Weight: 24.5kg

Power Warranty: 25 Years

Max Efficiency: 21.73%

Size:2094*1038*35mm



144 Cells 182mm

MAX 550W

Weight: 29kg

Power Warranty: 25 Years

Max Efficiency: 21.50%

Size:2279*1133*35mm



156 Cells 182mm

MAX 600W

Weight: 31.5kg

Power Warranty: 25 Years

Max Efficiency: 21.38%

Size:2376*1133*35mm



FULL BLACK SOLAR PANEL

Full black solar panels are made by adjusting the raw materials and equipment process to achieve the appearance of all black components, so as to achieve the perfect balance of beauty and efficiency, and realize the perfect integration with the surrounding environment.

This solar panels reduce the reflectivity of the battery, improve the utilization of sunlight, and improve the efficiency of the battery and module power.



MAX 395W

Weight: 21kg
Power Warranty: 25 Years
Max Efficiency: 20.50%
Size: 1754*1096*30mm

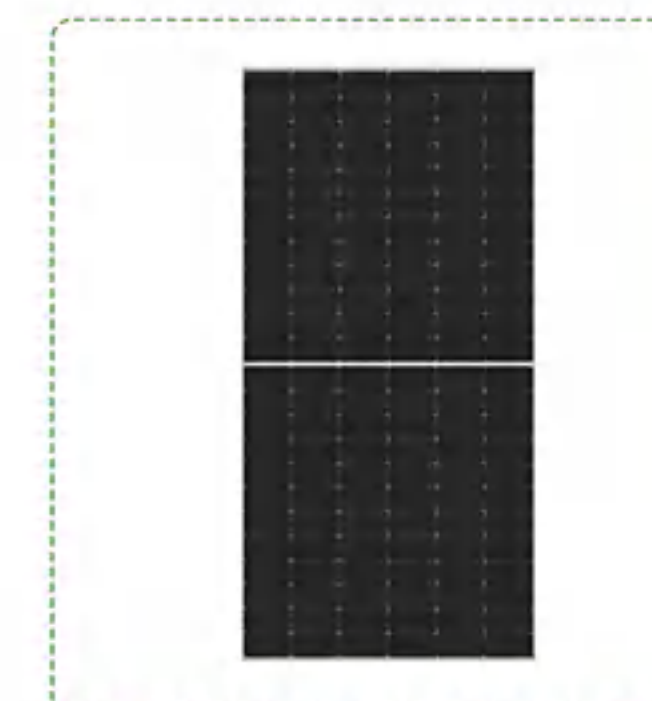
TIER 1 SOLAR PANEL

We not only have our own brand solar panels, but also tier 1 solar panels, like Jinko, Trina, Canadian, GCL, Seraphim.



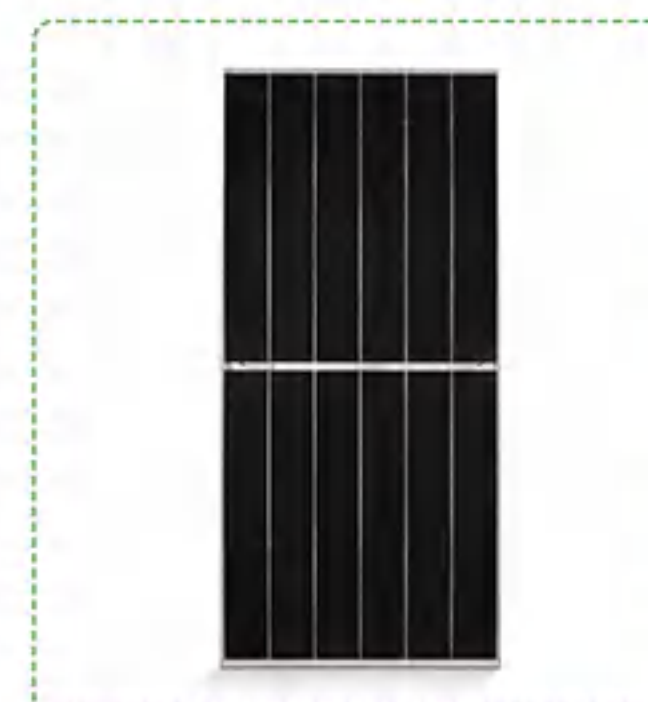
Trina Solar MAX 405W

Weight: 21kg
Power Warranty: 25 Years
Max Efficiency: 21.10%
Size: 1754*1096*30mm



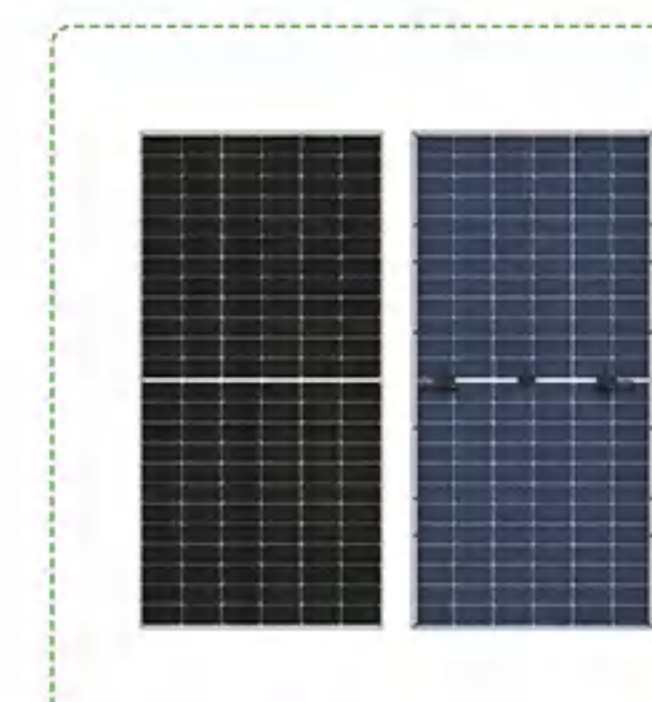
Jinko Solar MAX 545W

Weight: 32kg
Power Warranty: 25 Years
Max Efficiency: 21.13%
Size: 2274*1134*35mm



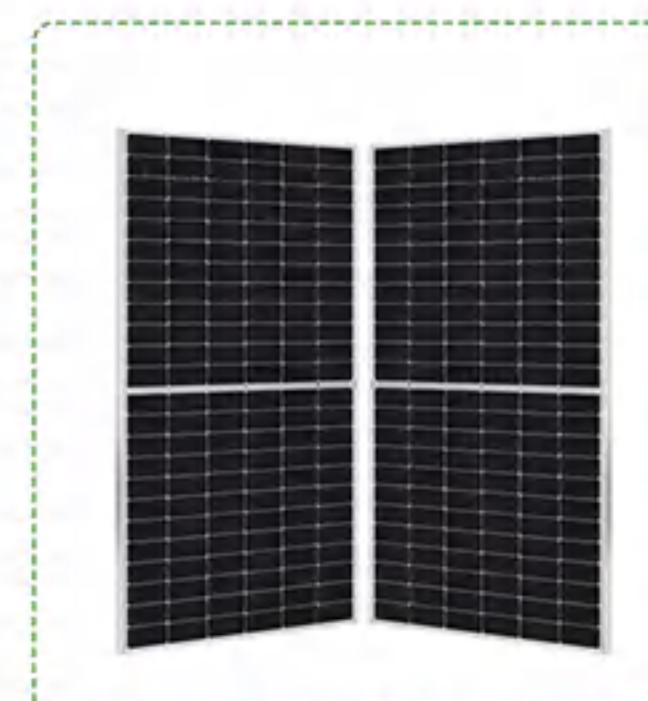
Jinko Solar MAX 550W

Weight: 28kg
Power Warranty: 25 Years
Max Efficiency: 21.33%
Size: 2274*1134*35mm



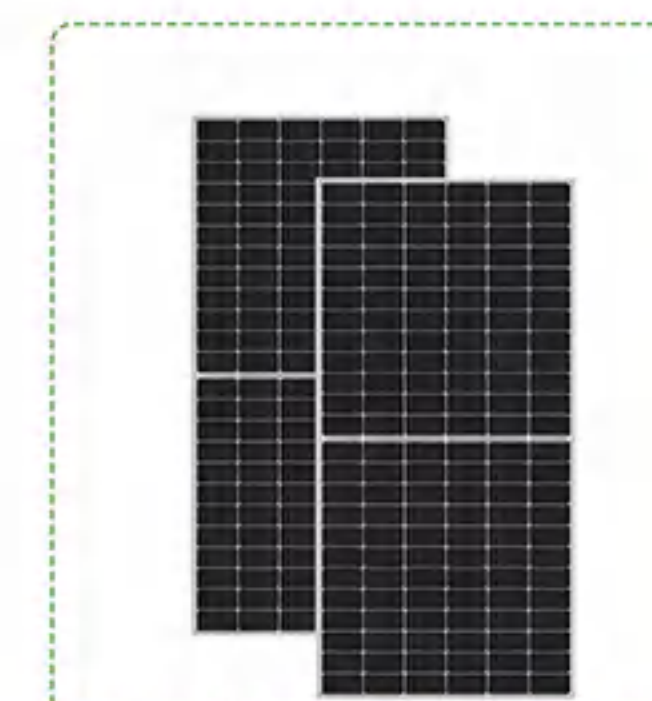
JA SOLAR MAX 465W

Weight: 25kg
Power Warranty: 25 Years
Max Efficiency: 20.80%
Size: 2120*1052*35mm



SERAPHIM MAX 450W

Weight: 23.5kg
Power Warranty: 25 Years
Max Efficiency: 20.70%
Size: 2094*1038*35 mm



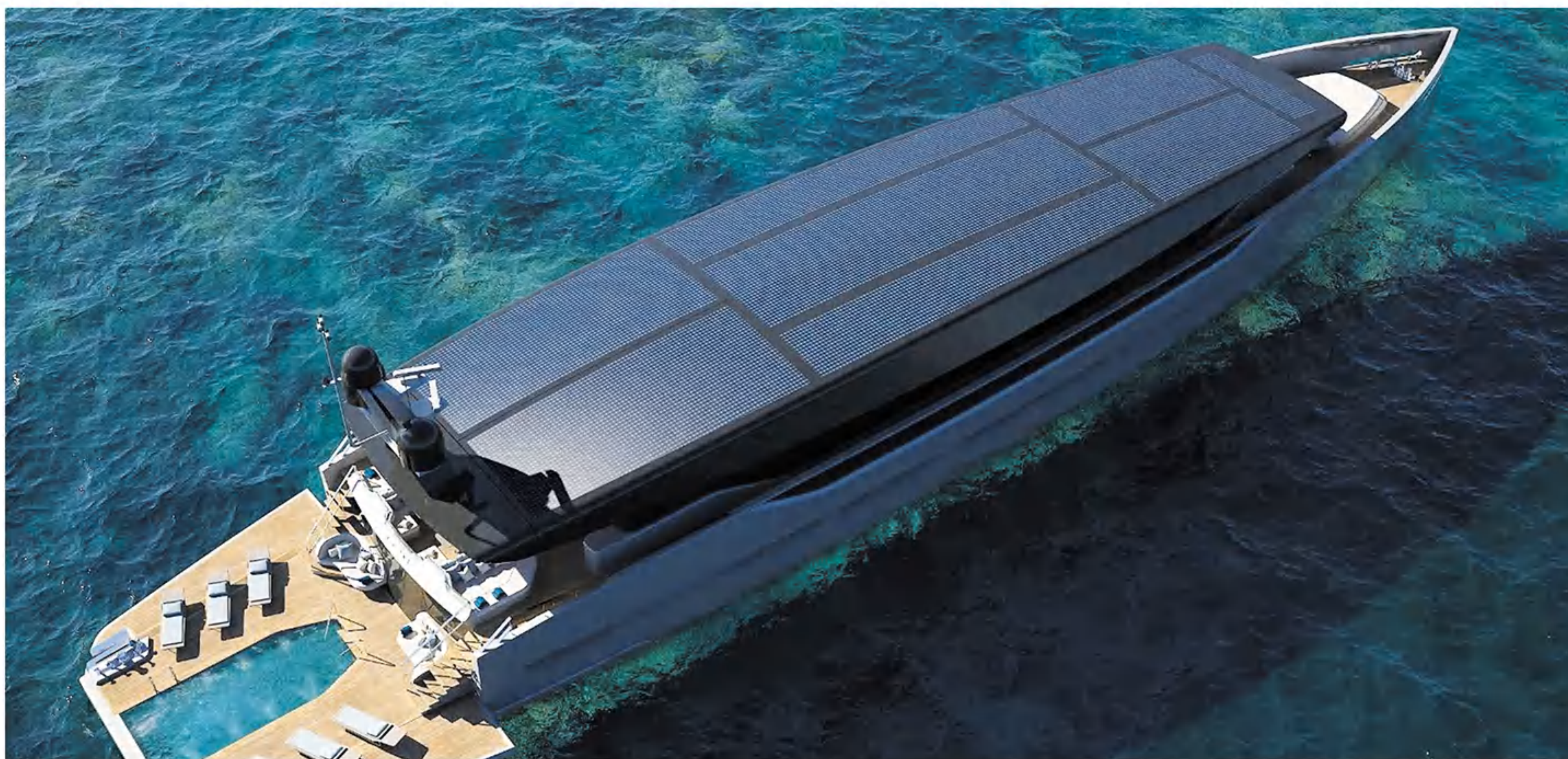
GCL MAX 465W

Weight: 25.1kg
Power Warranty: 25 Years
Max Efficiency: 21.00%
Size: 2108*1048*35mm









MAX 455W

Weight: 25.1kg
Power Warranty: 25 Years
Max Efficiency: 20.89%
Size: 2096*1039*35mm



★ FEATURES:

-  Optimized composite materials, 70% lighter at the same power
-  Flexible encapsulating and patent materials
-  Esthetics module design, no flare effect, "0" risk of micro crack
-  Original design making it far less costly for installation
-  Customization for various scenarios, high additional value
-  IP68 grade waterproof junction and drainage pipe

FLEXIBLE SOLAR PANEL

Flexible solar panel have advanced technology, excellent performance, low cost and wide range of applications. It can be applied to solar backpacks, solar convertible, solar flashlights, solar cars, solar sailboats and even solar airplanes. An important application area for flexible solar modules is photovoltaic building integration, which can be integrated into Windows or roofs, exterior walls or interior walls.



90W/150W

Weight: 2kg

Power Warranty: 25 Years

Max Efficiency: 19%

Size: 1665*646*1mm



315W-330W

Weight: 7.6kg

Power Warranty: 25 Years





Max Efficiency: 20.4%

Size: 1770*1000*4mm

HJT SOLAR PANEL

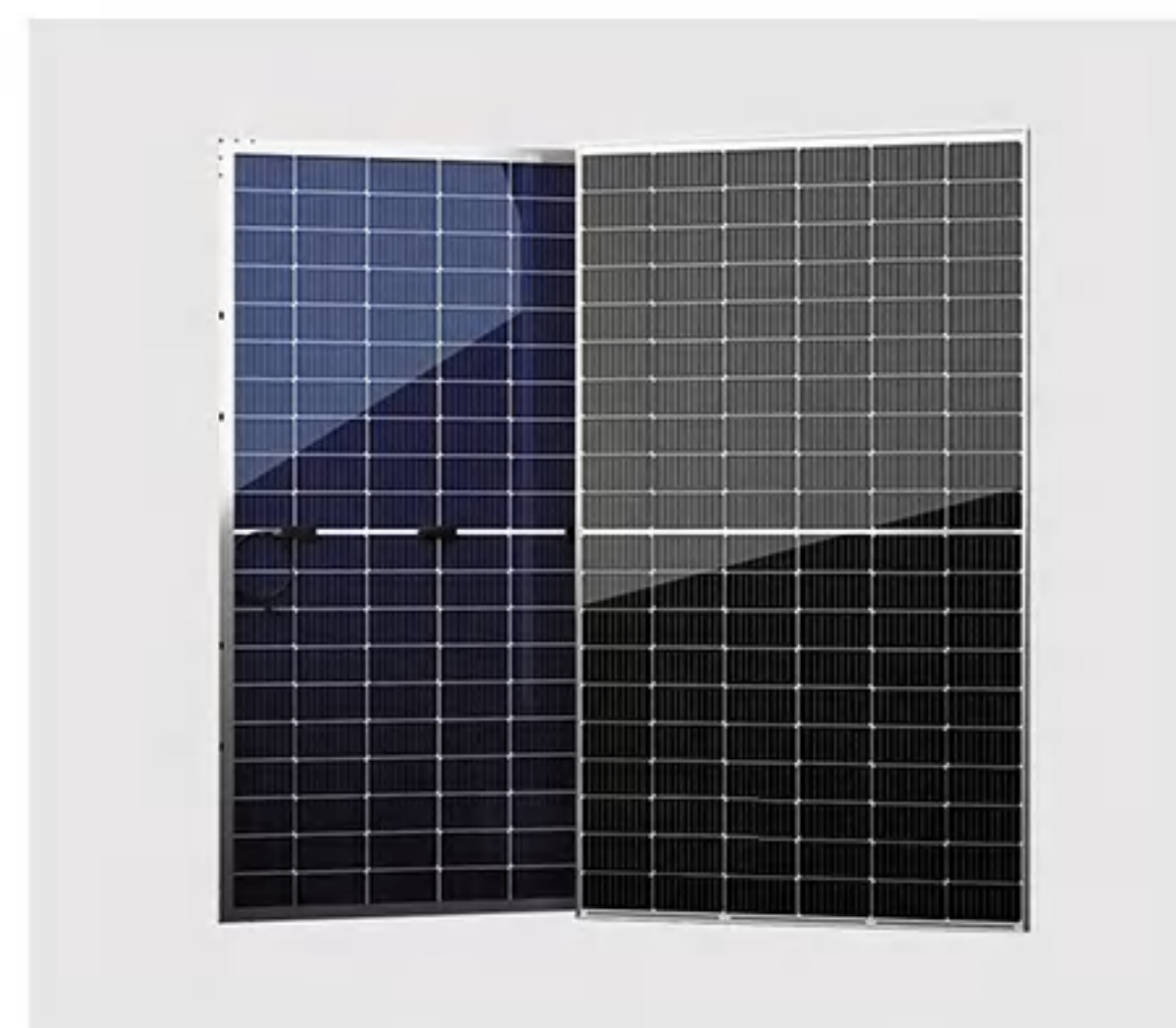
The HJT cell is designed with conductive TCO surface and insulation-free layer, so there is no build-up surface layer charge. Compared to PERC module, HJT features lower power temperature coefficient and higher output power. It is about 4.9% more efficient in power

under 60°C operation temperature. The effective power generation time of HJT is 11.07% more than the effective power generation time of conventional cells.

- 
PID Fire class A, harsh environment adaptability
 Consist of double-glass, with special design cells, Outstanding anti-PID performance.
- 
30 -year power warranty
 Bifacial module ensures 30-year outdoor operation, longer than the conventional type of normally 25 years.
- 
Elegant appearance & high performance
 The bifacial module is of high light transmittance to ensure good performance, an advanced solution that enables more energy generation, light capturing and elegant appearance.
- 
1500V system voltage
 Maximum 1500V DC system voltage , excellent insulation performance and lower total system cost.



PRODUCT INTRODUCTION



380~400W

Weight: 22.8kg
 Power Warranty: 30 Years
 Max Efficiency: 21.96%
 Size: 1755*1038*30mm



680~700W

Weight: 38.7kg
 Power Warranty: 30 Years
 Max Efficiency: 22.53%
 Size: 2384*1303*35mm



455~475W

Weight: 27kg
 Power Warranty: 30 Years
 Max Efficiency: 21.85%
 Size: 2094*1038*30mm

ON GRID SOLAR INVERTER

On grid inverter is a special inverter, in addition to the DC can be converted to alternating current, its output alternating current can synchronize with the frequency and phase of the mains, so the output alternating current can be returned to mains.



2.5~6KW



3~15KW



15~36KW



25~40KW



20~35KW



50~80KW

OFF GRID SOLAR INVERTER

The off-grid inverter is a power conversion device, which pushes and pulls the input DC to boost the voltage, and then converts the input DC into 220V AC through the inverter bridge SPWM sinusoidal pulse width modulation technology.



3~5KW



4~12KW



3.5~5KW



1~10KW



10~30KW



5KW





HYBRID SOLAR INVERTER

When the power grid is normal, the inverter switches to the grid-connected power generation mode. When the power grid is abnormal, the inverter will automatically detect the switch to the off-grid power generation mode. Although the power grid is abnormal, the inverter will continue to output the photovoltaic power inverter into high-quality AC power to supply the load.



8KW

- 2 MPPT
- High power factor
- IP65 Ingress protection
- Six Time of use setting
- Max efficiency up to 97.6%
- Support generator connection

6KW

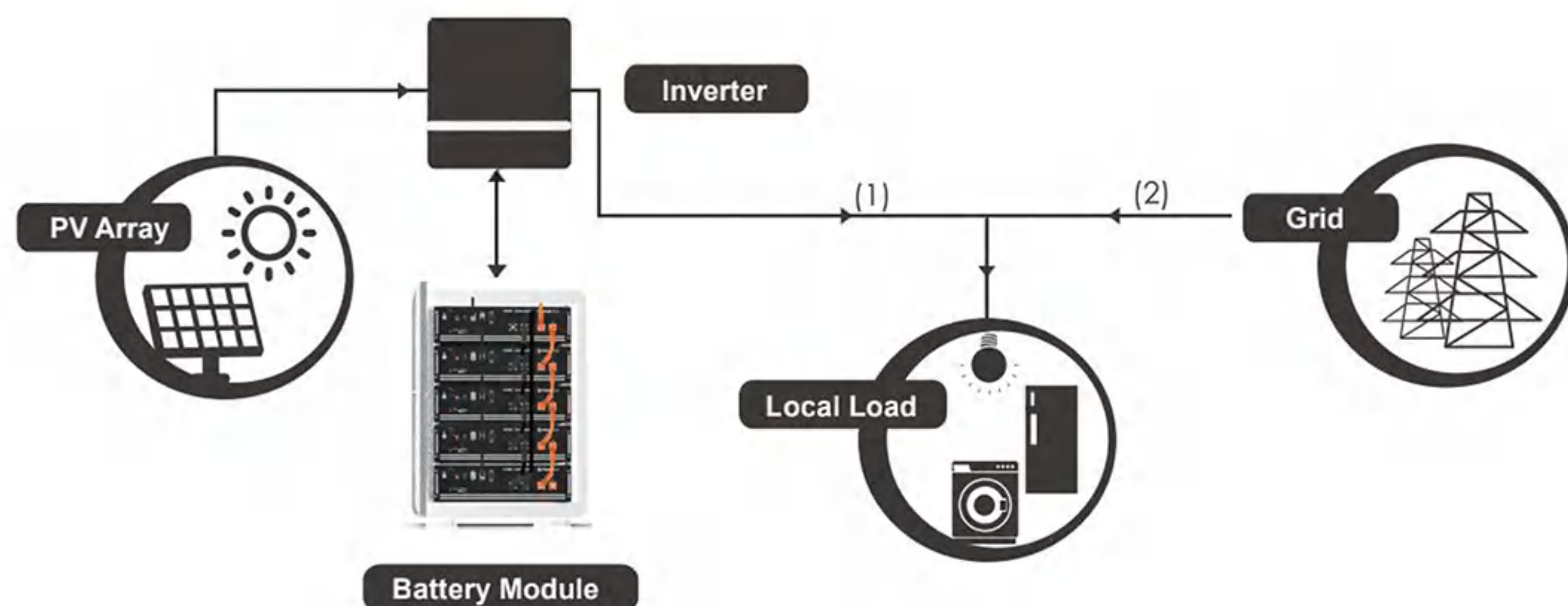
- 120A MPPT
- RGB light
- Touch button and LCD
- Built inside with BMS
- WIFI monitor



SOLAR BATTERY

—LITHIUM BATTERY

Lithium-ion battery is a kind of battery which is made of lithium metal or lithium alloy as positive/negative material and uses non-aqueous electrolyte solution.



Working Principle

★ FEATURES:

- Compact size and light weight
- 6000 cycles, 10 years design life
- Safe lithium iron phosphate battery cell
- Standard design with helpful pulling ear quick stacking
- TUV CE IE62619 IEC62040 UN38.3 CEC certifications
- Each module is equipped with an independent BMS system



PRODUCT DISPLAY



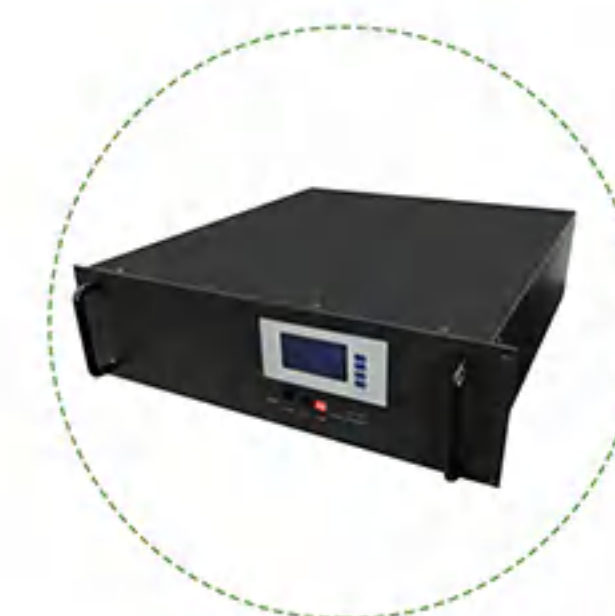
50~74AH



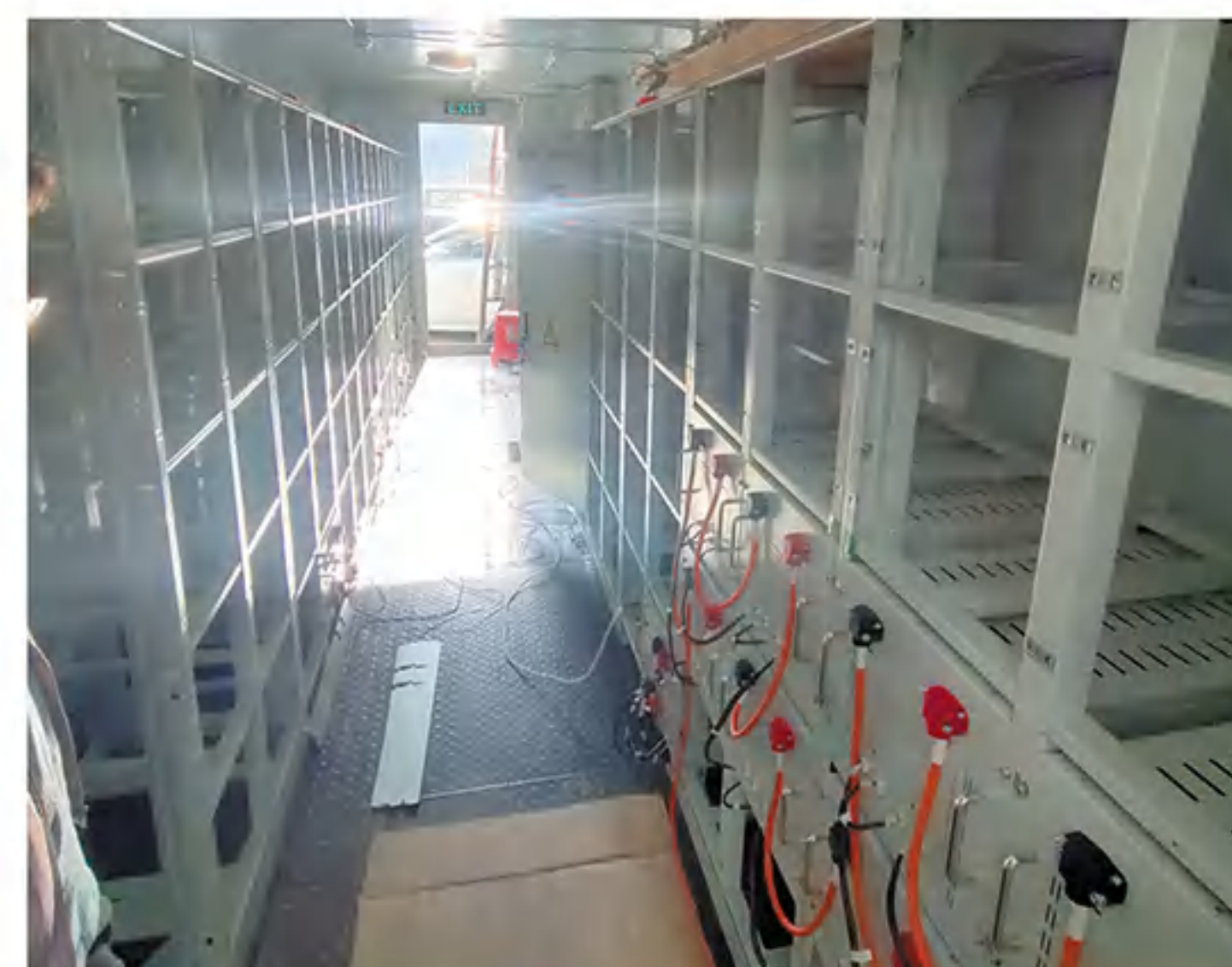
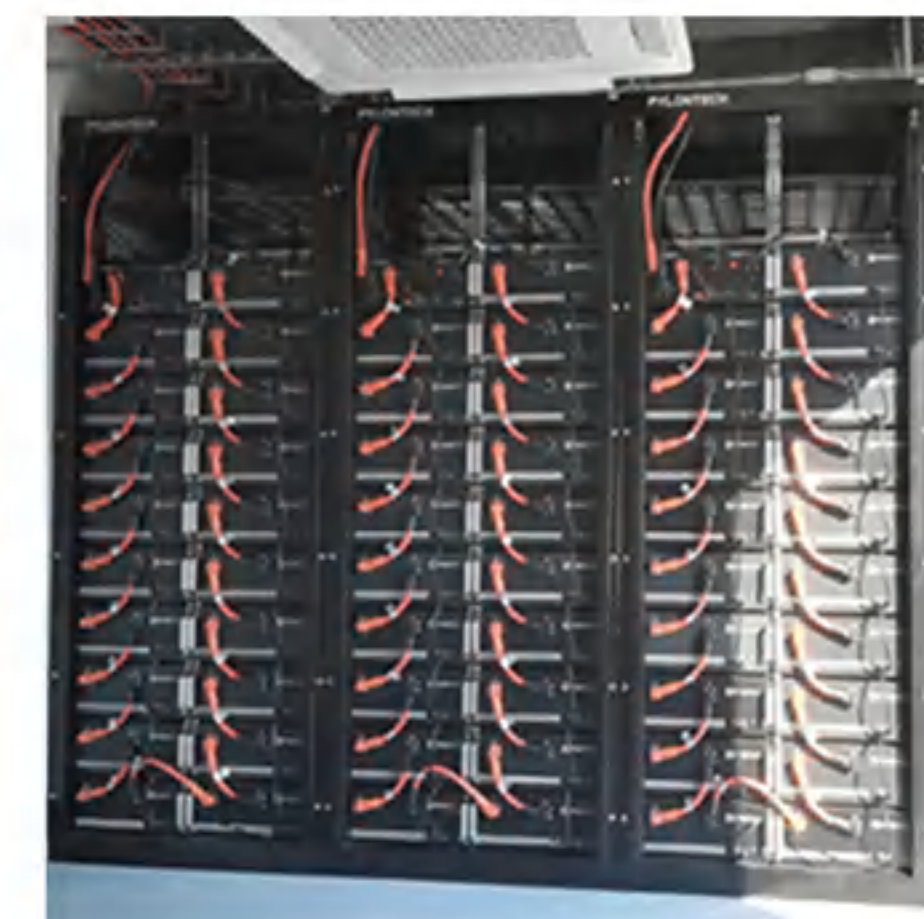
100~200AH



100AH



50~100AH





Nominal Voltage: 48V/51.2V

Nominal Capacity: 100AH/150AH/200AH

Product Warranty: 5 Years

SOLAR BATTERY

—WALL-MOUNTED LITHIUM BATTERY

51.2V200AH

FEATURES:

- ▶ Wall mounted good-looking appearance
- ▶ Long warranty period, 5 years
- ▶ Higher energy density, light and small volume for household
- ▶ Support Connected in parallel mode for expansion
- ▶ Compatible with Solar, ESS or UPS System
- ▶ Remote control and monitor from PC or cellphone terminals



Nominal Voltage: 48V/51.2V

Nominal Capacity: 50AH/100AH/150AH

Product Warranty: 5 Years



Nominal Voltage: 48V/51.2V

Nominal Capacity: 200AH

Product Warranty: 5 Years

SOLAR BATTERY

—REMOVABLE LITHIUM BATTERY

Advantage:

- ✓ Easy to move
- ✓ Remote control
- ✓ Modular design
- ✓ Capacity/power can be freely selected
- ✓ Safe and reliable
- ✓ With a design life of more than 10 years
- ✓ Reliable LiFePO4 battery Cell
- ✓ compact and light, single person installation



SWB51.2V-400Ah

Nominal Voltage: 51.2V

Nominal Capacity: 300AH/400AH

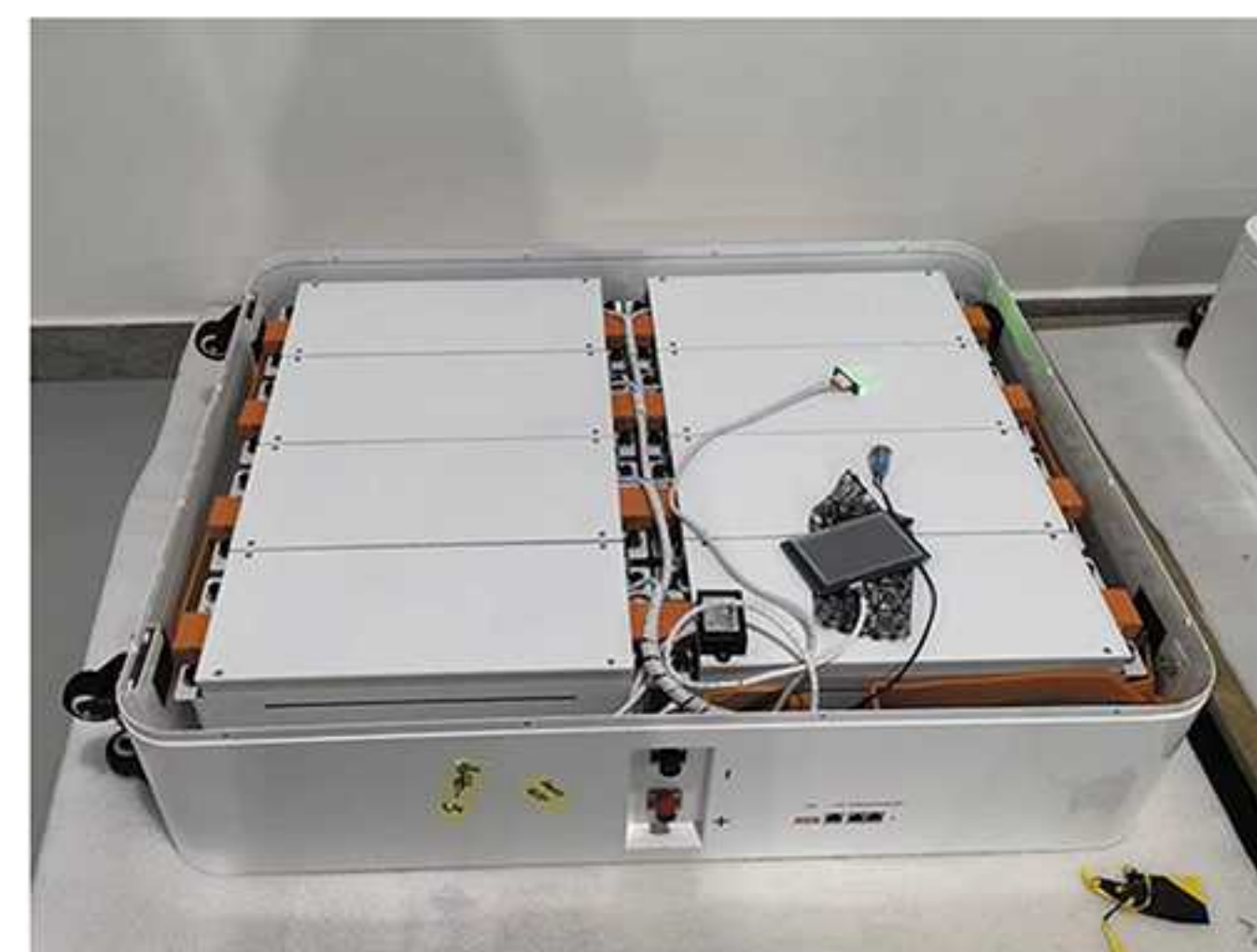
Module Size: 920*735*235mm

SWB51.2V-55Ah

Nominal Voltage: 51.2V

Nominal Capacity: 55AH

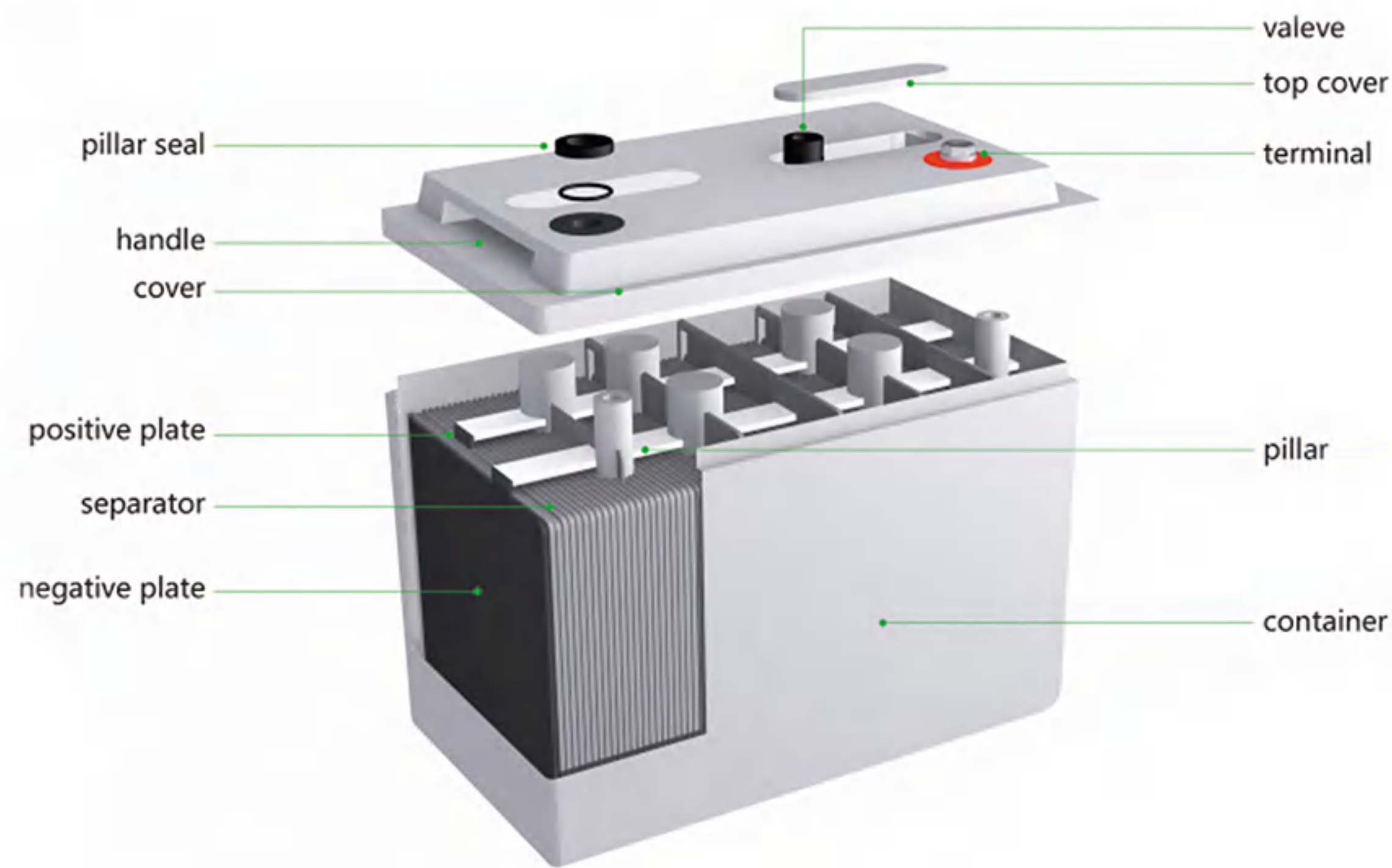
Module Size: 227x280x486mm(1 UNIT)





SOLAR BATTERY—GEL LEAD ACID BATTERY

Gel lead-acid battery is an improvement of ordinary lead-acid battery with liquid electrolyte. The colloid electrolyte is used to replace sulphuric acid electrolyte. Compared with ordinary battery, the gel electrolyte has better safety, storage capacity, discharge performance and service life.



Analytical Diagram

★ FEATURES:

- Deep cycle long lifespan
- High discharge performance
- Easy installation and maintenance-free
- The designed life for the battery could be eight years up for float use
- Contemporary advanced technology research and developent of new high-performance battery



🔋 Nominal Capacity:

12V
100AH

12V
150AH

12V
200AH

12V
250AH

📱 Projects Display:



ACCESSORIES



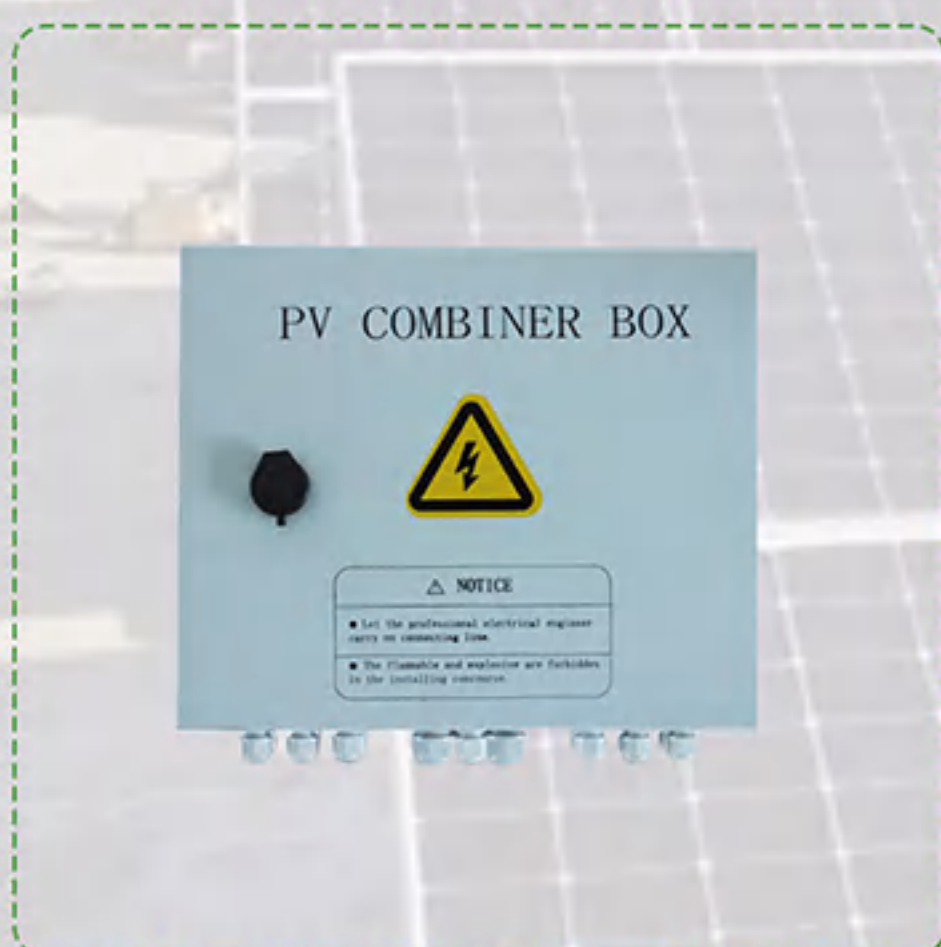
Mounting System

- > Residential Roof(Pitched Roof)
- > Commercial Roof(Flat roof&workshop roof)
- > Ground Solar Mounting system
- > Vertical wall solar mounting system
- > All aluminum structure solar mounting system
- > Car parking solar mounting system



PV Cable

- > PV Cable 4mm2 6mm2
- > AC Cable
- > DC Switches
- > AC Breaker
- > AC/DC Combine box



DC/AC Combiner Box

- > IP Rating: IP65
- > Rated Voltage: 1000VDC
- > Input cable terminal: 4-6mm2



Shine Wifi

- > Easy to use
- > Plug-and-play commissioning
- > 100-meter wireless connection to inverter
- > Remote firmware updating for inverter
- > Free online monitoring via Shine Server



MC4 Connector

- > PV Cable 4mm2 6mm2
- > AC Cable
- > DC Switches
- > AC Breaker
- > AC/DC Combine box



PV Tools

- > Wire Cable Cutter & Stripper
- > MC3 MC4 Crimper
- > MC4 Connectors Assembly
- > Disassembly Tool



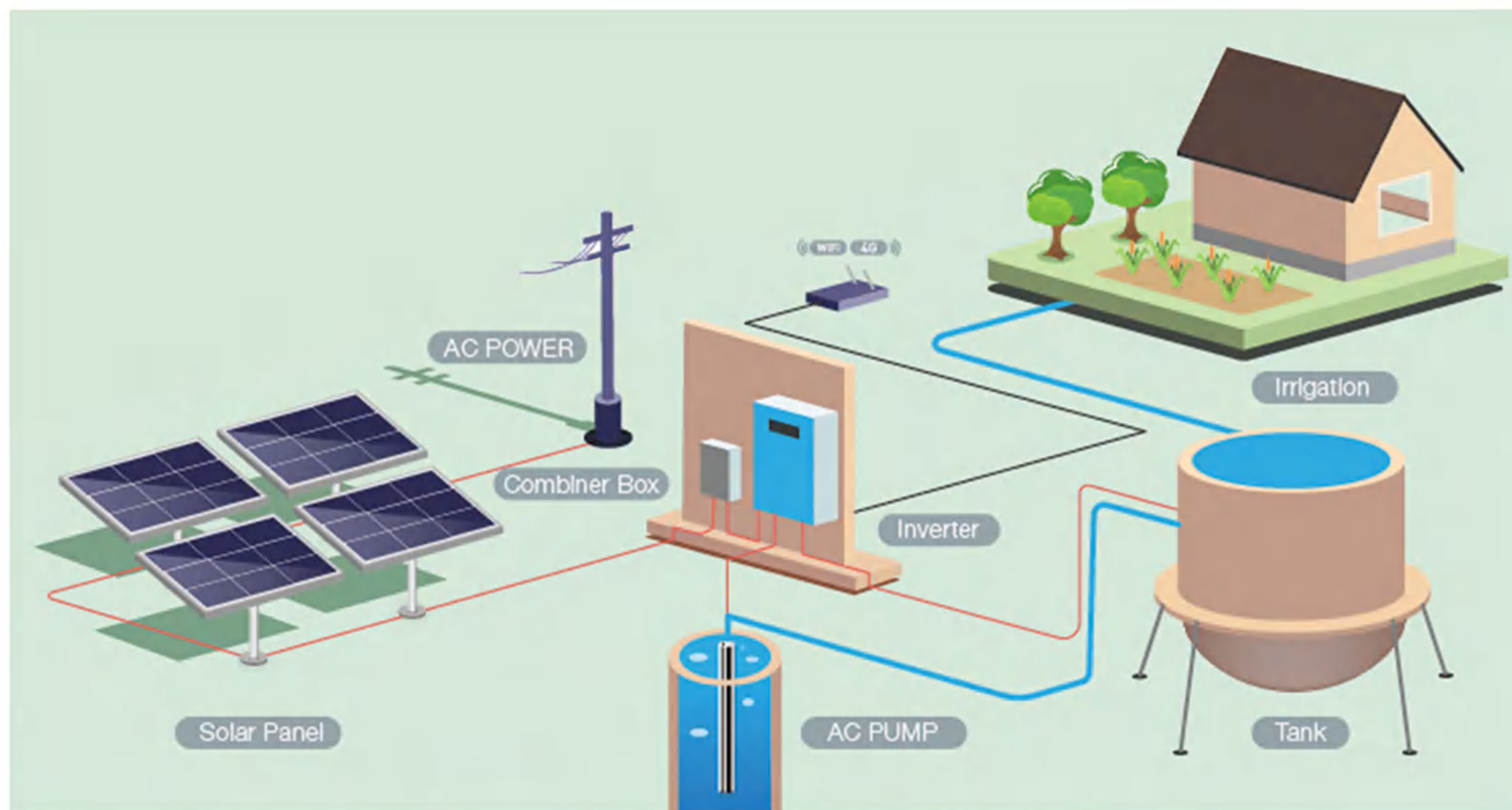
DC/AC Breaker

- > Provide Overcurrent Protection
- > Direct Current Control Circuit Application
- > Automatic Device Against Overload

SOLAR WATER PUMP

—DC/AC PUMP

Solar pump system can be applied to daily use(groundwater).Agricultural irrigation,forestry irrigation,desert control,pasture animal husbandry,water supplier for islands waste water treatment engineering and so on,solar tech solar pumping system is depends on energy storing devices,and stores water instead of electricity.It improve the device,and at the same time it lowers the construction and maintenance cost if the system dramatically.In recent years, with the promotion of the utilization of new energy resources,solar pump system are widely used in municipal engineering,city centre squares,parks,tourist sites,resorts and hotels,the landscapes and fountain system in the residential areas.



Work Principle



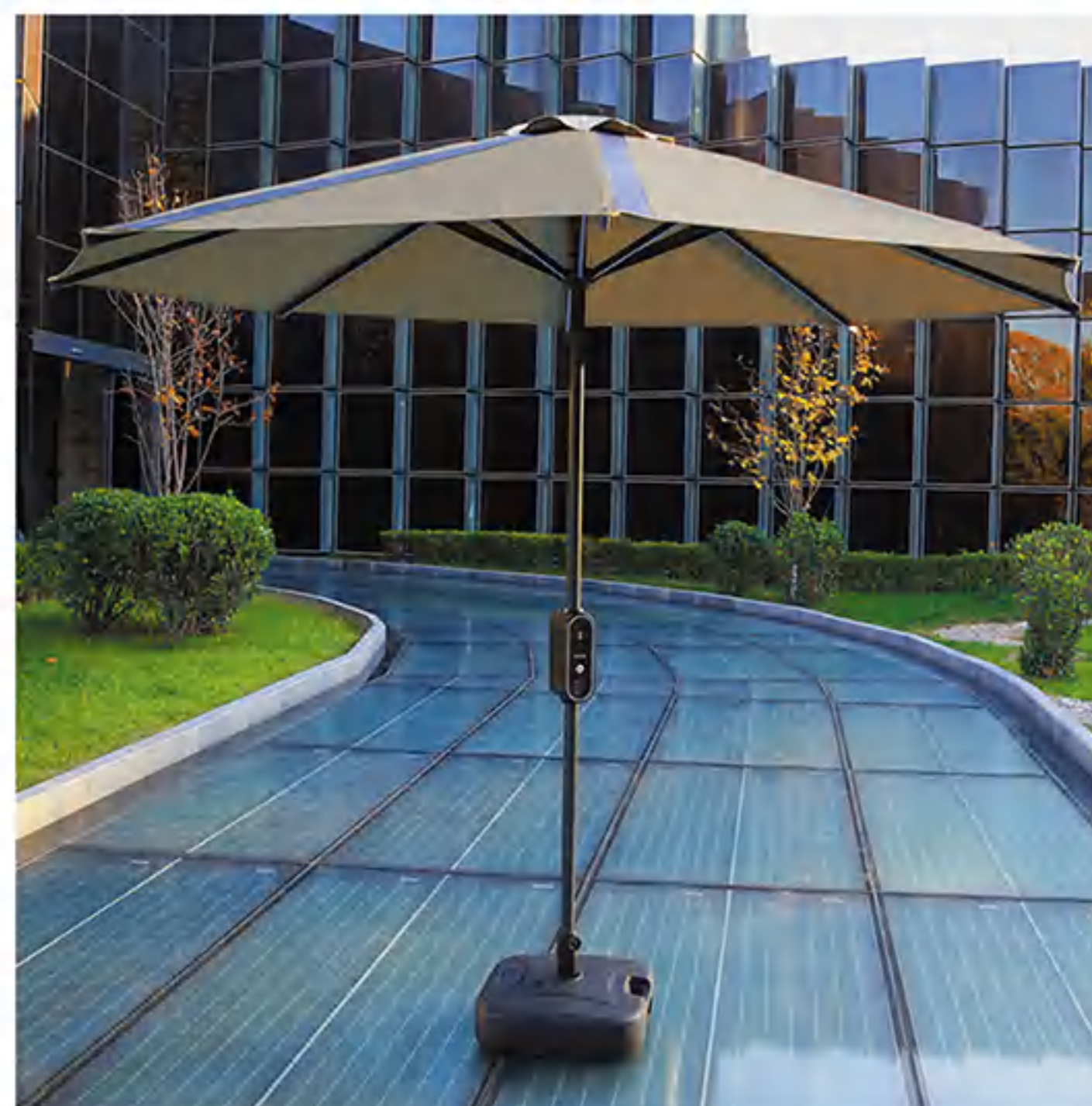
★ FEATURES:

- 304 S/S pump shaft
- IP65 waterproof grade
- 2 years warranty for pump
- Waterproof and leak-proof
- Automatically start and stop working
- Reduce the consumption of solar panels



SOLAR UMBRELLA

Solar umbrella is a newly developed outdoor sunshade umbrella, the top of the umbrella has a solar cell, the umbrella under the charging socket, can be charged through the solar energy or power supply, the top and lower part of the umbrella is equipped with LED lights, can be used with lighting at night.



☀ Off-grid power supply

💡 Night illumination

🔋 Electricity storage

🔌 Terminal charging

PRODUCT DISPLAY



Dark Red



Light Brown



Dark Green



WIND TURBINE

The small wind turbine grid-connected power generation system is generally composed of small wind turbines, rectifier, unloading control, grid-connected inverters and other components. The wind energy is converted into AC power by the fan, and then converted into DC power through the controller, and then the DC power is converted into a sine wave current of the same frequency and phase in the same direction through the grid-connected

inverter, and is fed into the power grid.

Small and medium-sized wind turbine structure and manufacturing process is relatively simple, the cost is also low, the main pursuit of users is high efficiency, low noise, long life, and cheap price. Wind power is taking off around the world because it has no fuel problems, no radiation or air pollution.



High efficiency of wind energy

Low starting wind speed, wind energy utilization rate is high



High security

The design of interior fuselage with double bearing, effective guarantee the stability of the fan type, security, low vibration.



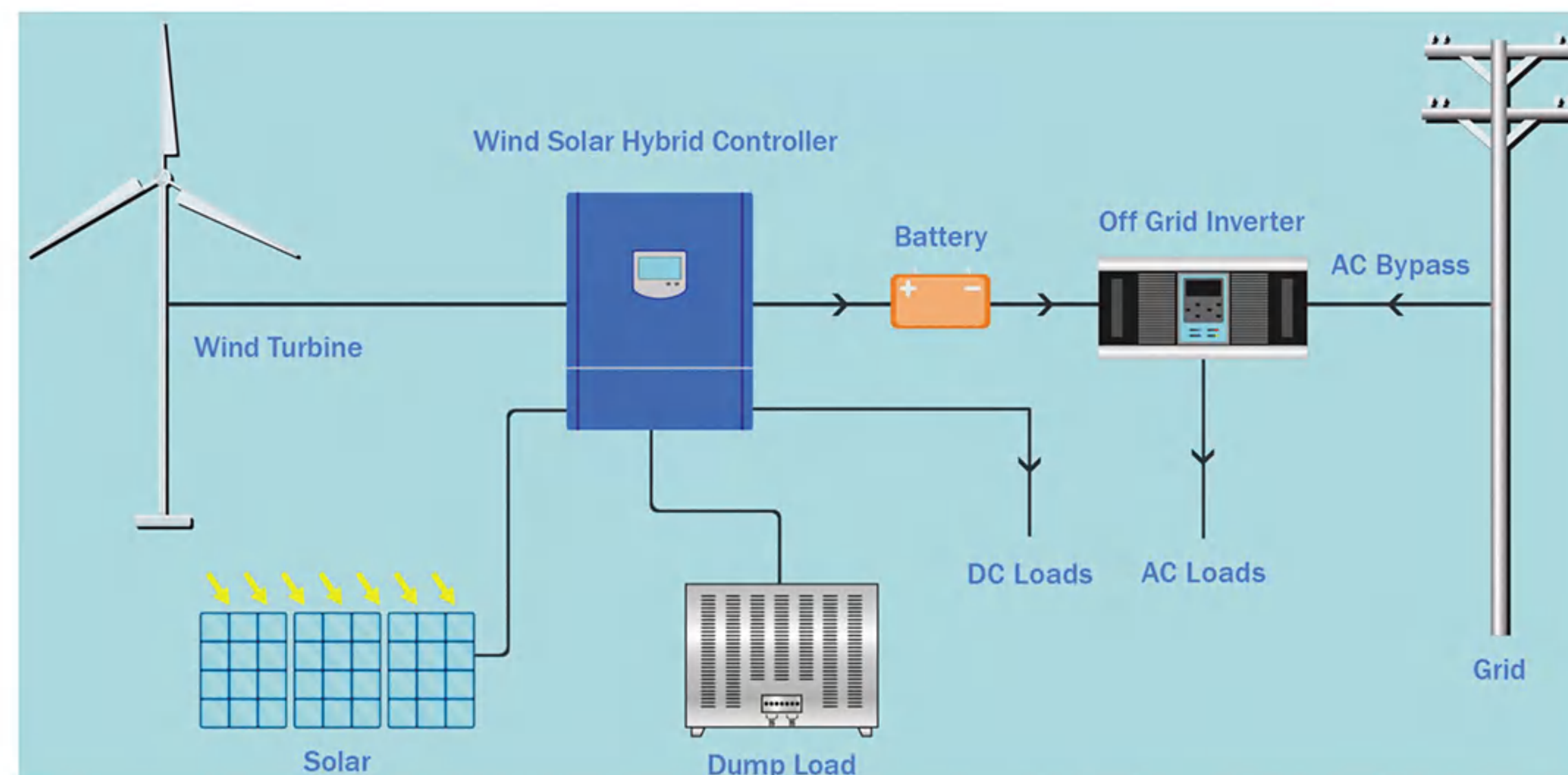
Easy installation

Easy to install and use, humanized design, equipment maintenance and repair low price



Long service life

The fuselage, the wheel hub, and other products are plastic coloring, anti-corrosion, fade, rust prevention, long service life.



Wind Power System

PROJECT CASES



SOLAR STREET LIGHTS

The biggest advantage of solar street lamps is to save energy. The products that can convert the sunlight in nature into their own energy can indeed reduce a lot of electricity consumption. Now after the development of urban construction, the investment of street lamps has increased. The application of solar street lamps saves a considerable amount of electric energy for the country every day.

Advantage:

- ✓ Simple construction
- ✓ Low maintenance cost
- ✓ Very high safety performance
- ✓ Good durability and practicability
- ✓ Green and Environmental Protection
- ✓ Cheaper than traditional street lamps



All in one Light



All in one Light(with bracket)



Solar Motion Sensor Light



Solar Post Cap Light





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