COMMITTED TO WIND & SOLAR HYBRID POWER SYSTEM SOLUTIONS

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ECO CONCEPT

ECO CONCEPT ENERGY CORPORATION

HORIZONTAL AXIS WIND TURBINE

WHERE THERE IS SUN
THERE IS POWER

EL-S1 EL-S2 EL-S3 EL-S4

- Low start-up wind speed, small size, beautiful appearance and low vibration during operation;
- Use the humanized flange installation design, which is convenient for installation and maintenance;
- The blades are made of nylon fiber, with low starting wind speed and high wind energy utilization coefficient;
- The generator adopts the magnet-bearing rotor alternator of Amway technology, equipped with a special rotor design, which effectively reduces the resistance torque of the generator, which is only 1/3 of the ordinary motor, and at the same time makes the wind wheel and generator more powerful. for good matching characteristics;
- Adopt maximum power tracking intelligent microprocessor control to effectively adjust current and voltage;

Model	EL-S-100W	EL-S-200W	EL-S-300W	EL-S-400W	EL-S-500W	EL-S-600W	EL-S-700W	EL-S-800W
Rated power	100W	200W	300W	400W	500W	600W	700W	800W
Maximum power	110W	220W	330W	440W	550W	660W	770W	880W
Rated voltage	12/24V	12/24V	12/24V	12/24V	12/24V	12/24V	12/24V	12/24V
Start-up wind speed	3.0m/s	3.0m/s	3.0m/s	3.0m/s	3.0m/s	3.0m/s	3.0m/s	3.0m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s	14m/s	14m/s	14m/s	14m/s
Survival wind speed	40m/s	40m/s	40m/s	40m/s	40m/s	40m/s	40m/s	40m/s
Number of blades	3/5/6/8 pieces							
Blade material	nylon fiber							
Body material	aluminium alloy							
Generator	three phase AC permanent magnet generator/maglev generator							
Control system	electromagnetic brake							
Yaw mode	automatic windward angle							
Lubrication mode	self lubrication							
Tower form	guyed tower/independent tower							
Working temperature	-40°C-80°C							

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More power and voltage can be customized

HORIZONTAL AXIS WIND TURBINE

WHERE THERE IS SUN
THERE IS POWER

EL-M1

EL-M2

EL-M3

EL-M4

EL-M5

- Low starting wind speed, small size, and beautiful appearance.
- Use humanized flange installation design for easy installation and maintenance:
- The aluminum alloy body and wind turbine blades are made of nylon fiber material, with optimized aerodynamic exterior color design and structural design. The starting wind speed is low, the wind energy utilization coefficient is high, and the annual power generation is increased:
- The generator adopts a patented permanent magnet rotor AC generator with a special rotor design, effectively reducing the positive torque of the generator, which is only 1/3 of that of a regular motor. At the same time, the wind turbine and generator have better matching characteristics, ensuring the reliability of unit operation.

Model	EL-M-1KW	EL-M-2KW
Rated power	1000W	2000W
Maximum power	1100W	2200W
Rated voltage	12/24/48V	12/24/48V
Start-up wind speed	3m/s	3m/s
Rated wind speed	14m/s	14m/s
Survival wind speed	40m/s	40m/s
Number of blades	3/5 pieces	
Blade material	nylon fiber	
Body material	aluminium alloy	
Generator	three phase AC permanent magnet generator/maglev generator	
Control system	electromagnetic brake	
Yaw mode	automatic windward angle	
Lubrication mode	self lubrication	
Tower form	guyed tower/independent tower	
Working temperature	-40°C-80°C	

More power and voltage can be customized

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HORIZONTAL AXIS WIND TURBINE

L SERIES

- Low starting wind speed, small size, strong visual appeal, and low assistance for walking dance;
- Adopting humanized flange installation design to ensure safety
Installation and maintenance;
- Retain the alloy body and use high-quality fiberglass blades,
The anti-corrosion performance blocks noise, making it both aesthetically pleasing and durable. The color of the drum can be customized according to customer requirements;
- A motor that utilizes patented technology from an unprocessed rotor AC generator. Equipped with a ball holding design.
Effectively reduce the positive torque of the generator. Only one-third of that of a regular electric motor. Meanwhile, wind turbines and generators have better matching characteristics. The reliability of mechanical long-distance travel.
- Adopting maximum power cost tracking intelligent microprocessor control. Effective current and voltage

Model	EL-L-3KW	EL-L-4KW	EL-L-5KW	EL-L-7KW	EL-L-8KW
Rated power	3KW	4KW	5KW	7KW	8KW
Maximum power	3.3KW	4.4KW	5.5KW	7.7W	8.8KW
Rated voltage	24/48V	24/48V	48/96/120V	96/120/220v	120/220V
Start-up wind speed	3m/s	3m/s	3m/s	3m/s	3m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s	14m/s
Survival wind speed	45m/s	45m/s	45m/s	45m/s	45m/s
Number of blades	3 pieces				
Blade material	nylon fiber				
Body material	aluminium alloy				
Generator	three phase AC permanent magnet generator/maglev generator				
Control system	electromagnetic brake				
Yaw mode	automatic windward angle				
Lubrication mode	self lubrication				
Tower form	guyed tower/independent tower				
Working temperature	-40°C-80°C				

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HORIZONTAL AXIS WIND TURBINE

G SERIES

- Low start up speed,3 blades ,high wind energy utilization.
- Easy installation, tube or flange connection optional.
- Application of precision injection molding for blades, matched with optimized aerodynamic shape and structure which enhance the wind energy utilization and annual output.
- Body of casting aluminum alloy, with 2 bearings swivel , making it survive stronger wind and run more safely.
- The generator using patented magnetic bearing alternator, coupled with a special stator design, effectively reduce the resistance torque of the generator, while the wind wheel and the generator has a more good matching characteristics, the unit running reliability.
- It is ideally suited for the leisure sector and is known for charging batteries for boats, gazebos, cabins or mobile homes, as well as for green windmills, home, corporate and industrial energy supplements.

Model	EL-G-8KW	EL-G-10KW	EL-G-15KW	EL-G-20KW	EL-G-30KW	EL-G-40KW
Rated power	8KW	10KW	15KW	20KW	30KW	40KW
Maximum power	8.8KW	11KW	16KW	22KW	33KW	44KW
Rated voltage	120/220V	120/220V	120/220V	120/220V	120/220V	220V
Start-up wind speed	3m/s	3m/s	3m/s	3m/s	3m/s	3m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s	14m/s	14m/s
Survival wind speed	40m/s	40m/s	40m/s	40m/s	40m/s	40m/s
Number of blades	3 pieces					
Blade material	nylon fiber					
Body material	aluminium alloy					
Generator	three phase AC permanent magnet generator/maglev generator					
Control system	electromagnetic brake					
Yaw mode	automatic windward angle					
Lubrication mode	self lubrication					
Tower form	guyed tower/independent tower					
Working temperature	-40°C-80°C					

VERTICAL AXIS WIND TURBINE

ET

• Low starting wind speed, small size, strong visual appeal, and low assistance for walking dance;

• Rotation radius. Because of its design structure and special operating principle, it has a smaller radius of rotation than other types of wind turbines, it saves space, while improving efficiency;

• Operation and maintenance. Direct drive type permanent magnet generator, without gear box and steering mechanism, regularly(usually every six months) check the connection of the running parts;

• Appliacation. The turbine could be installed near facilities, such as residences, parks, schools, building rooftops, roads and walking street, etc;

Model	ET-500	ET-1000	ET-1500	ET-2000
Rated power	500W	1000W	1500W	2000W
Maximum power	550W	1100W	1650W	2200W
Optional voltage	12/24V	12/24/48V	24/48/V	24/48/V
Start-up wind speed	2m/s	2m/s	2m/s	2m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s
Leaf material	FRP/Composite material			
Number of blades	2 pieces			
Body material	aluminium alloy			
Generator	Coreless 3 phase AC generator			
Control system	electromagnetic brake			
Lubrication mode	self lubrication			
Tower form	guyed tower/independent tower			
Working temperature	-40°C-80°C			

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VERTICAL AXIS WIND TURBINE

- This new turbine is easy to install on the roof of a house, just like installing a solar panel. It reaches its peak power generation efficiency at wind speeds of 14 meters per second.

- The design of this new wind turbine solves the problems of efficiency and noise. Its shape is like a nautilus shell and it automatically points to the best position of the wind like a pennant to achieve maximum production. According to CTO Marinus, the maximum yield is 80%,which is much higher than other wind turbines.

- The new turbine captures the wind's kinetic energy by twisting it and reducing its speed to near-zero wind levels, converting it into mechanical energy. The effect of wind speed on the rotor is maximized, and boosted by the wind's acceleration on the rotorcraft.

Model	ELEGE-500W	ELEGE-1000W	ELEGE-2000W	ELEGE-5000W
Ratedpower	500W	1000W	2000W	5000W
Maximum power	550W	1100W	2200W	5500W
Optional voltage	12V	12/24V	24/48V	24/48V
Start-upwindspeed	1.5m/s	1.5m/s	1.5m/s	1.5m/s
Ratedwind speed	14m/s	14m/s	14m/s	14m/s
Leafmaterial	FRP/Compositematerial			
Numberof blades	3pieces			
Bodymaterial	aluminiumalloy			
Generator	Coreless3phaseACgenerator			
Control system	electromagneticbrake			
Lubrication mode	selflubrication			
Towerform	guyedtower/independenttower			
Working temperature	-40°C-80°C			

More power and voltage can be customized

ECO CONCEPT

VERTICAL AXIS WIND TURBINE

EL-H1

EL-H2

EL-H3

EL-H4

Features

H-type

- Safety The vertical blade is adopted, and the main stress point isconcentrated on the hub, so the problems of blade falling off, fractureand blade flying out have been better solved.
- Noise Horizontal plane rotation and blade design based on the principle ofaircraft wing are adopted to reduce the noise to a level that can notbe measured in the natural environment.
- Wind resistance The principle of horizontal rotation and vertical flat blade makes itless subject to wind pressure and can resist super typhoon.
- Turning radius Because of its different design structure and operation principle, ithas smaller turning radius than other forms of wind powergeneration, saves space and improves efficiency.
- Generation curve characteristicsThe start-up wind speed is lower than that of other types of windturbines, and the rising range of power generation is relatively gentle.Therefore, within the wind speed range of 5 - 8m, its powergeneration is 10%- 30% higher than that of other types of windturbines.
- Utilization wind speed range The special control principle is adopted to expand its suitableoperating wind speed range to 2.5 ~ 25m / s, maximize the use ofwind resources, obtain greater total power generation, and improvethe economy of wind power equipment.
- Braking deviceThe blade itself has speed protection and is also equipped withelectromagnetic brake.

Model	EL-H1-500W	EL-H2-1000W	EL-H3-2000W	EL-H3-3000W	EL-H4-5000W
Rated power	500W	1000W	2000W	3000W	5000W
Maximum power	550W	1100W	2200W	3300W	5500W
Rated voltage	12/24V	12/24V	24/48V	24/48V	48/96/220V
Start-up wind speed	2.5m/s	2.5m/s	2.5m/s	2.5m/s	2.5m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s	14m/s
Survival wind speed	40m/s	40m/s	40m/s	40m/s	40m/s
Number of blades	3/5 pieces				
Body material	aluminium alloy				
Generator	three phase AC permanent magnet generator/maglev generator				
Control system	electromagnetic brake				
Yaw mode	automatic windward angle				
Lubrication mode	self lubrication				
Tower form	guyed tower/independent tower				
Working temperature	-40°C-80°C				

More power and voltage can be customized

ECO CONCEPT

VERTICAL AXIS WIND TURBINE

EX Series

X-type

Features

- Curved blade design,utilizes wind resource effectively and obtainsahigher power generation.
- Coreless generator, Horizontal rotation and aircraft wing designreduce the noise to an unperceivable levelin naturalenvironmentWind resistance.
- Horizontal rotation and trianqular doublefulcrum design make it only bear a small wind pressure even instrong wind.
- Rotation radius. smaller rotation radius than other types of windturbines,spaceis saved while efficiencyimproved.
- Effective wind speed range. special control principle expendedthe wind speed to 2.5 ~ 25m/s, utilizes wind resource effectivelyand obtains ahiqher power generation.

Model	EL-EX-300W	EL-EX-800W	EL-EX-1000W	EL-EX-2000W
Rated power	300W	800W	1000W	2000W
Maximum power	330W	880W	1100W	2200W
Rated voltage	12/24V	12V/24V	24/48V	24/48V
Start-up wind speed	1.3 m/s	1.3 m/s	1.3 m/s	1.3 m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s
Cut-in wind speed	3.5m/s	3.5m/s	3.5m/s	3.5m/s
Number of blades	3 pieces			
Body material	glass/basalt			
Generator	Coreless Disc Generator			
Control system	electromagnetic brake			
Yaw mode	automatic windward angle			
Lubrication mode	self lubrication			
Tower form	guyed tower/independent tower			
Working temperature	-40~+80°C			

More power and voltage can be customized

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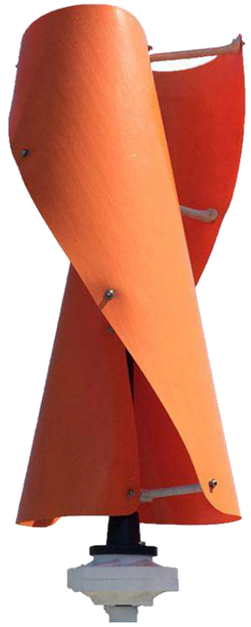
VERTICAL AXIS WIND TURBINE

EV Series



Features

- rich colors, the blade can be white, orange, yellow, blue green, mixed colors, and any other colors.
- a variety of voltage options, 3-phase AC output, suitable for 12V, 24V, 48V battery
- integrated blade design, to ensure higher rotational stability, low noise.
- coreless generator means lower starting torque, lower starting wind speed, longer service life.
- speed limit protection, no matter how high the wind speed, the speed is kept below 300, which can prevent the controller from overload. Complete set of fasteners and installation tools are included in the package.
- Long service life, the turbine can work 10-15 years under non-normal natural environment.

V-type

Model	EL-EV-500W	EL-EV-1000W	EL-EV-1500W	EL-EV-2000W
Rated power	500W	1000W	1500W	2000W
Maximum power	550W	1100W	1650W	2200W
Rated voltage	12/24V	12/24V	12/24/48V	24-220V
Start-up wind speed	1.3 m/s	1.3 m/s	1.3 m/s	1.3 m/s
Rated wind speed	10m/s	10m/s	11m/s	11m/s
Cut-in wind speed	3.5m/s	3.5m/s	3.5m/s	3.5m/s
Number of blades	2 pieces			
Body material	glass/basalt			
Generator	Coreless 3 phase AC generator			
Control system	Electromagnet			
Yaw mode	automatic windward angle			
Lubrication mode	self lubrication			
Tower form	guyed tower/independent tower			
Working temperature	-40~+80°C			

More power and voltage can be customized

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VERTICAL AXIS WIND TURBINE

ER Series

Features

- the use of nylon glass fiber has better flexibility, better solve the blade falling off, breaking, flying out and other problems.
- Noise based on the principle of aircraft wing horizontal plane rotation and blade design, reduce the noise to the natural environment can not be measured horizontal wind resistance horizontal rotation design principle makes it less affected by wind pressure, can resist super typhoon due to its different design structure and operating principle, its turning radius is smaller than other forms of wind power generation.
- Save space and improve efficiency. The starting wind speed is lower than that of other forms of wind turbines, the rise of power generation is gentle, and the stability is good.
- the use of wind speed range using a special control principle, the suitable operating wind speed range is expanded to 2.5 ~ 25m/s, in the maximum use of wind resources at the same time to obtain greater total power generation, improve the economy of wind power equipment. The brake blade itself has speed protection and can be configured with mechanical manual and electronic automatic braking.

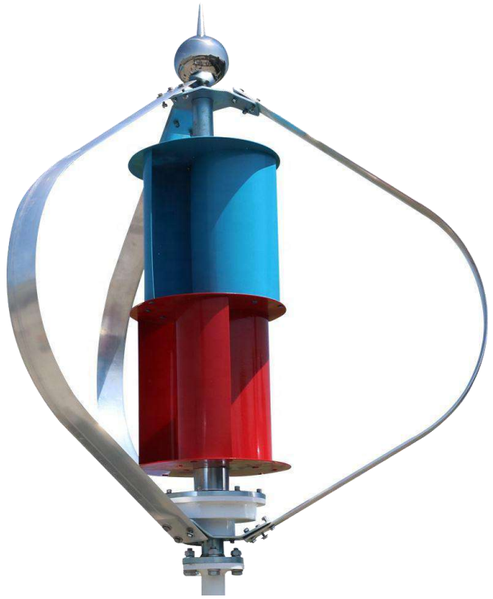
R-type

Model	EL-ER-100W	EL-ER-200W	EL-ER-300W	EL-ER-400W
Rated power	100W	200W	300W	400W
Maximum power	150W	220W	330W	440W
Rated voltage	12/24V	12/24V	12/24V	12/24V
Start-up wind speed	2 m/s	2 m/s	2 m/s	2 m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s
Cut-in wind speed	3.5m/s	3.5m/s	3.5m/s	3.5m/s
Number of blades	5 pieces			
Body material	nylon fiber			
Generator	three phase AC permanent magnet generator/maglev generator			
Control system	electromagnetic brake			
Yaw mode	automatic windward angle			
Lubrication mode	self lubrication			
Tower form	guyed tower/independent tower			
Working temperature	-40°C-80C			

ECO CONCEPT

VERTICAL AXIS WIND TURBINE

EQ Series



Features

- Safety: vertical blade and triangular double fulcrum design. The main stress points are concentrated in the hub, which better solves the problems of blade falling off, breaking and flying out.
- Using horizontal rotation and blade design based on the principles of aircraft wings, noise is reduced to levels that cannot be measured in the natural environment. Wind resistance
The integral blade is made of aluminum alloy. Horizontal rotation and triangular double fulcrum design principle, so that it is not affected by wind pressure, can resist super typhoons, improve efficiency.
- The starting wind speed of the generation curve is lower than that of other types of wind turbines, and the generating capacity is 10% ~ 30% higher than that of other types of wind turbines. The range of wind speed suitable for operation is expanded to 2.5 ~ 25m/s, which maximizes the use of wind resources while obtaining greater total power generation, improving the economy of wind power equipment. The blade itself has speed protection. Mechanical manual braking and electronic automatic braking can be set in typhoon-free areas and super typhoon areas.

Q-type

Model	EL-EQ-500W	EL-EQ-1000W	EL-EQ-2kW	EL-EQ-5KW	EL-EQ-10KW
Rated power	500W	1000W	2000W	5000w	10kw
Maximum power	550W	1100W	2200W	5500w	11kw
Rated voltage	12/24V	12/24/48V	24/48V	48/96/220V	220/380V
Start-up wind speed	3m/s	3m/s	3m/s	3m/s	3m/s
Rated wind speed	14m/s	14m/s	14m/s	14m/s	14m/s
Survival wind speed	40m/s	40m/s	40m/s	40m/s	40m/s
Number of blades	3 pieces				
Body material	Aluminium alloy				
Generator	three phase AC permanent magnet generator/maglev generator				
Control system	electromagnetic brake				
Yaw mode	automatic windward angle				
Lubrication mode	self lubrication				
Working temperature	-40°C-80C				

More power and voltage can be customized

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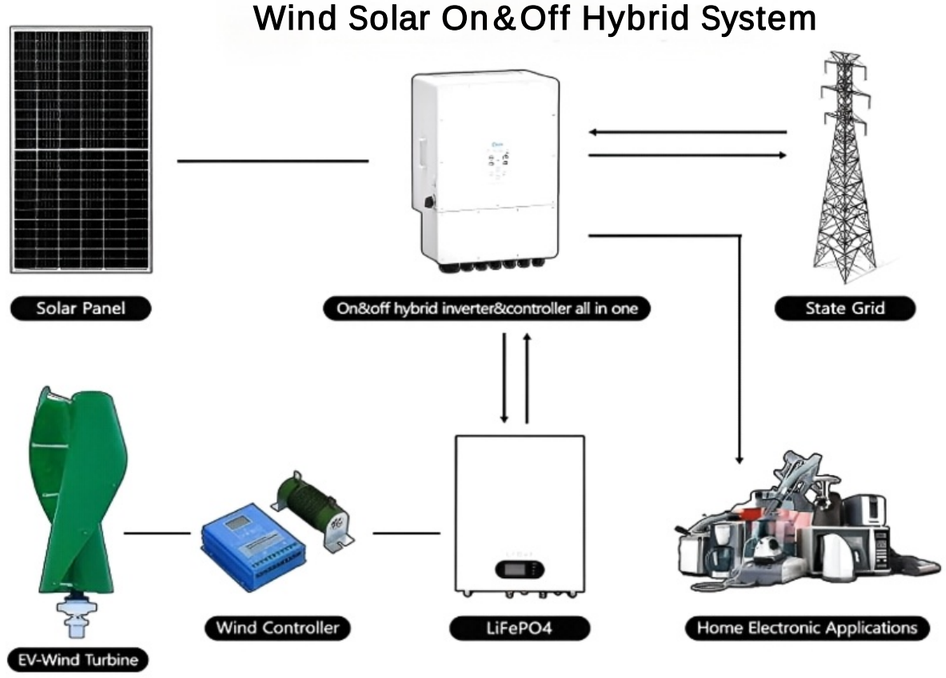
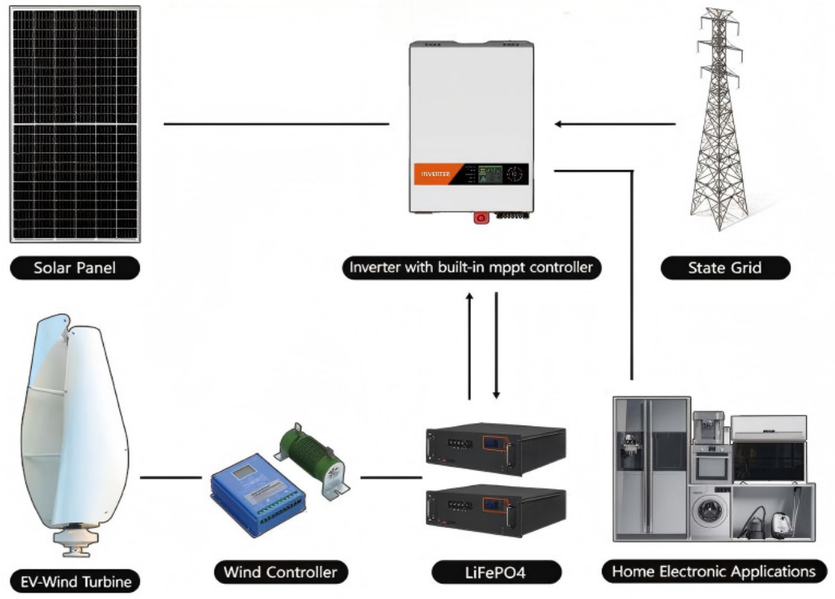
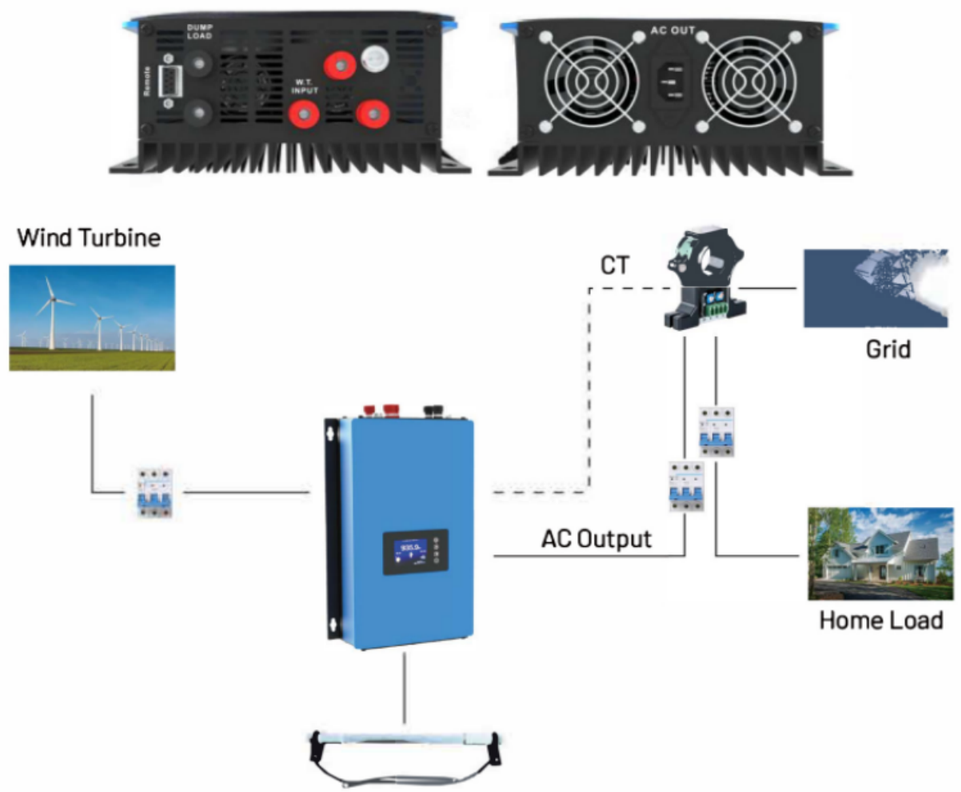
Wind Solar On&Off Hybrid System



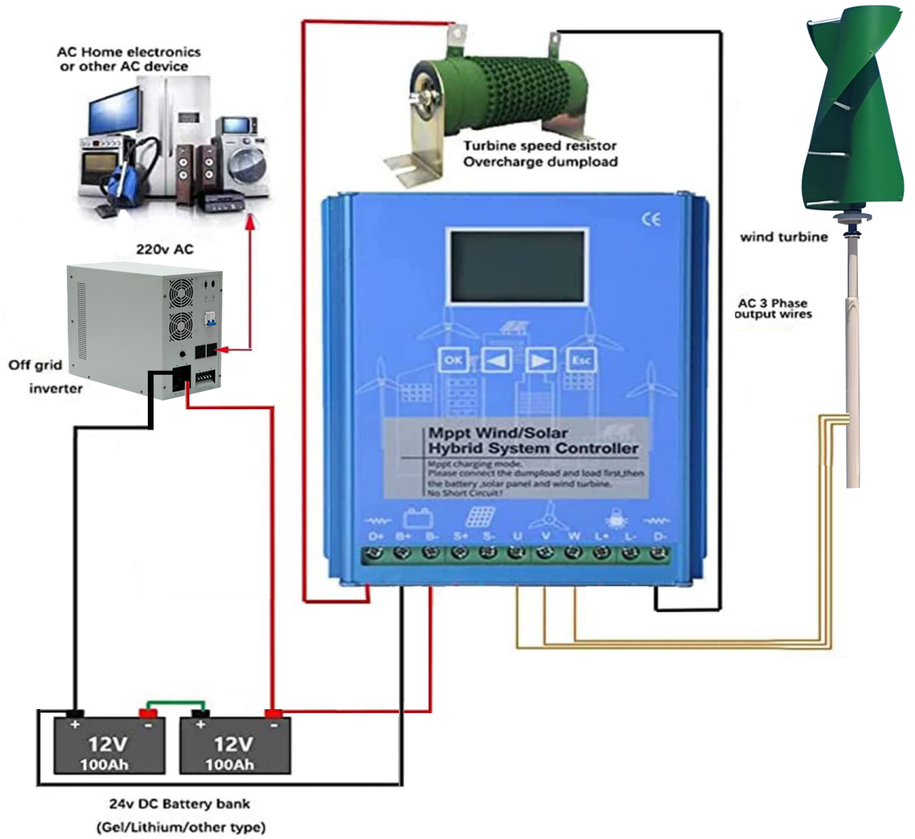
Wind Solar Off Hybrid Grid System



Wind Solar On Grid System



Wind Solar Off Grid System



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Engineering Cases

Engineering Cases

ECO CONCEPT

Engineering Cases

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THE BROAD MARKETING NETWORK

The broad marketing network, with the support of professional technology, characteristic of system plan, fast response time, the product covered more than 30 countries and areas in the world.

ECO "Service Support Center" establishes a complete set of service system.

The center consists of many professional engineers and builds up different teams for different types of customers.

"Service Support Center" has good operation and assurance mechanism, and keeps on focusing the management target on the fast response for customers.

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