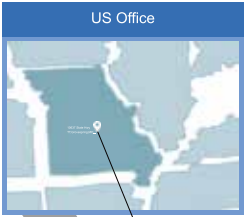


ECO-SOURCES

**SOLAR POWER &
BATTERY EXPERTS**

Since 2007

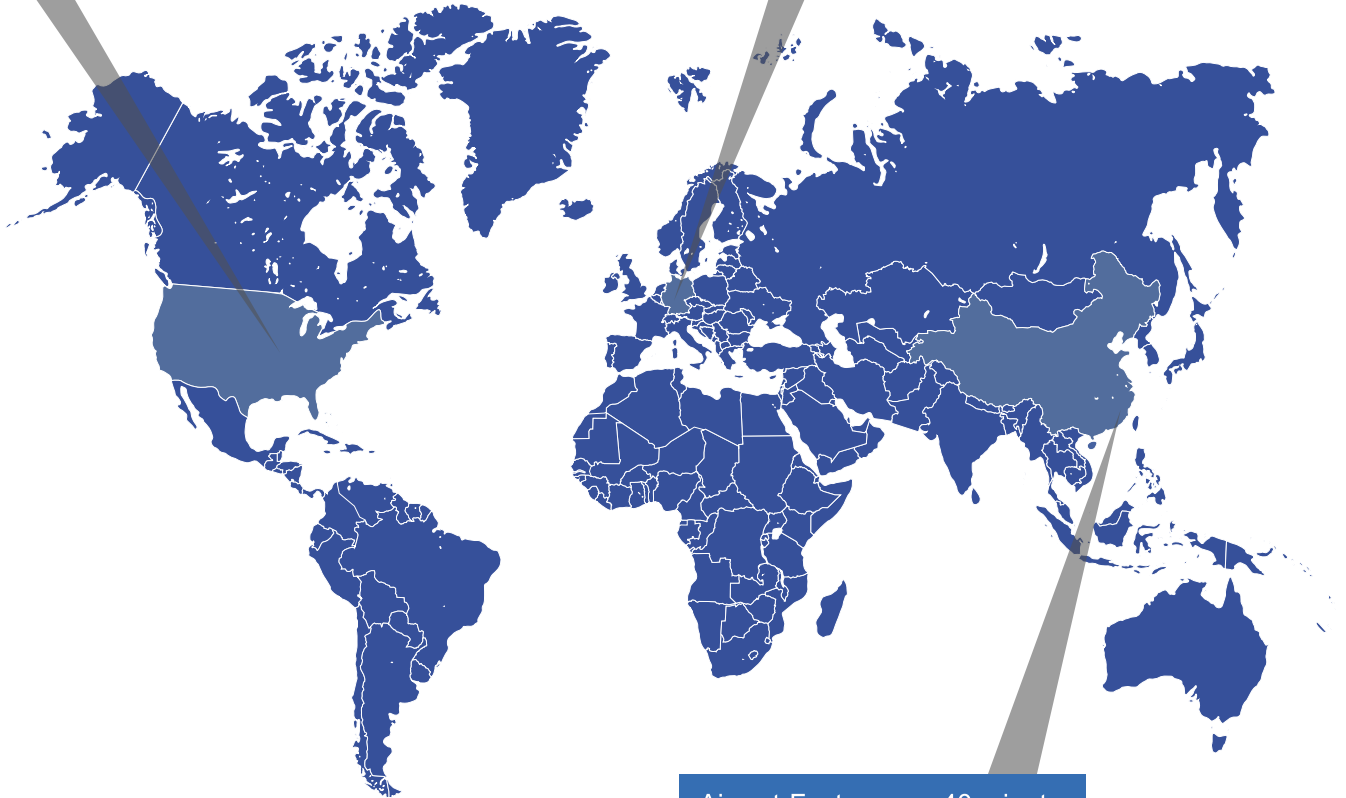




U.S. Office
10637 Highway TT
Grovespring, MO 65662



Otto-Hahn-Straße 20,
61381 Friedrichsdorf,
Germany



Airport-Factory ----- 40 minutes



Factory
(Xiamen, Fujian)

★ Xiamen, Fujian Company



Official Website
(www.eco-sources.com)



Alibaba Website
(eco-sources.en.alibaba.com)

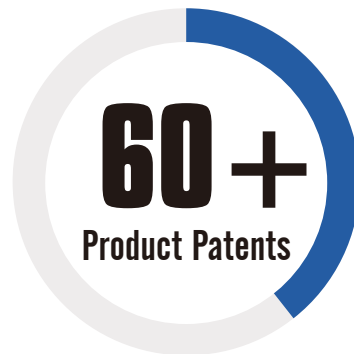
Contents

01	 	Company Profile	01-02
02	 	Manufacture Process	03-04
03	 	Product Application	05-06
04	 	Product Specifications	07-32
4.1		Lithium Battery	08-16
4.2		Solar Panel	17-22
4.3		Inverter	23-24
4.4		Solar Inverter Charger	25-26
4.5		Solar Powered Fan	27-32
05	 	Solar System Reference	33-34

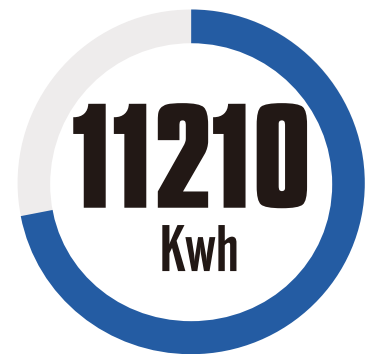
Company Profile



16 Years of Solar Power
and Lithium Battery R&D



15 R&D Experts
60+Product Patents



Our Factories Produce
More Than 11,210kWh of
Battery Energy Per Month

Xiamen Eco-Sources Technology Co. Ltd. was founded in 2007. It is a leading international lithium battery and solar energy manufacturer and supplier, integrating product R & D, intelligent manufacturing, and promotional marketing.

Our brand Eco-Worthy is one of the earliest lithium battery brands in the world. Our solar energy products includes lithium batteries, solar panels, inverters and solar vents.

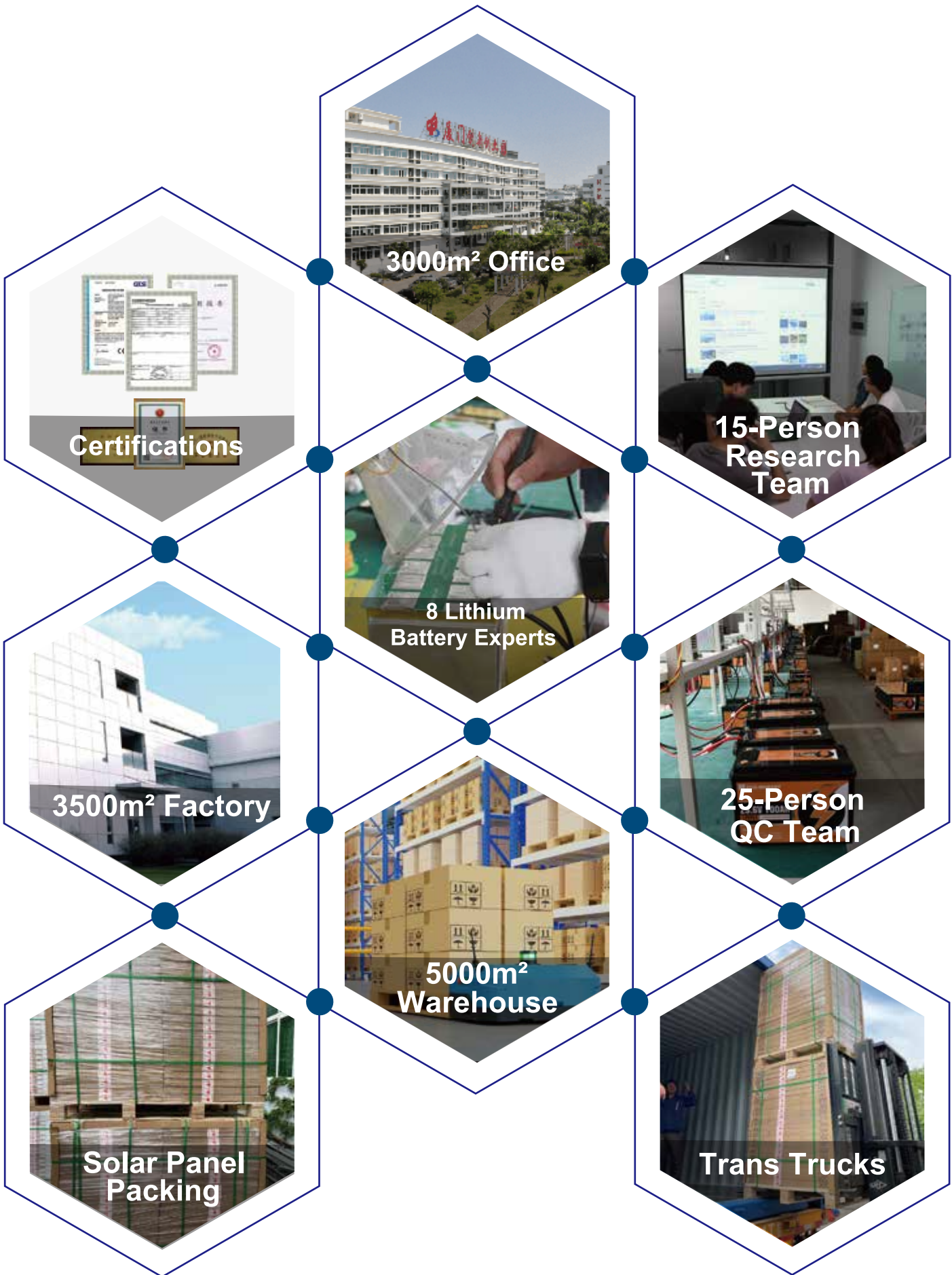
As a Chinese lithium battery manufacturer, we constantly leverage market resources and optimize the supply chain to provide top-notch products that are both high in quality and competitively priced.

We are proud to offer various selection for our customers, whether it's through OEM, ODM, or distribution partnerships, to meet their diverse needs.

Mail:sales@eco-sources.com

www.eco-sources.com

Tel:+86 18559201506





Manufacture Process ▶▶▶



01

Battery Cell Testing



02

Pole Cutting



03

BMS Testing



04

Pole Polishing



05

Laser welding



06

Tin Solder



07

Shrink Wrapping



08

Equilibrium Test



09

Assembly Line



10

Pre Packed Products



11

Pre-Inspection Area



12

Aging Room



13

Aging Test

Product Application

Go with independent power



Easy Solar for RV

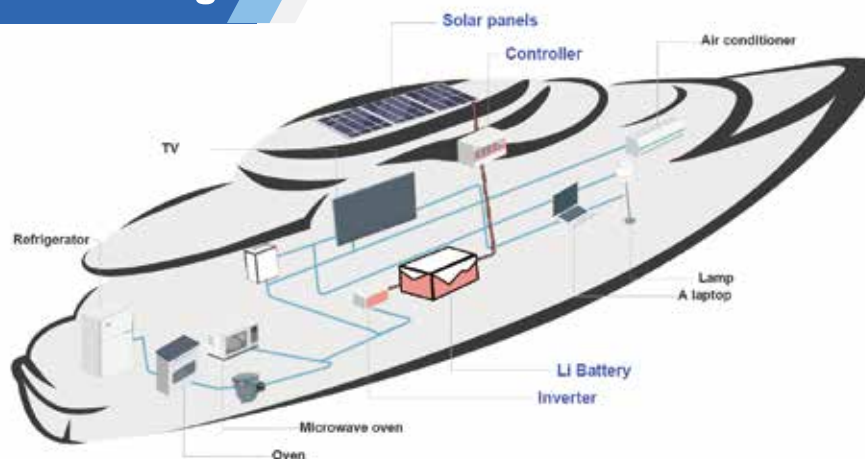
Complete Kits

We provide complete solar power kits, which contains solar panels, a charge controller, batteries, inverter, and cabling.

Customized

We offer customized products and kits for those who plan to design their own solar solutions as they see fit.

Enjoy cold drinks while sailing



Easy Solar for Marine

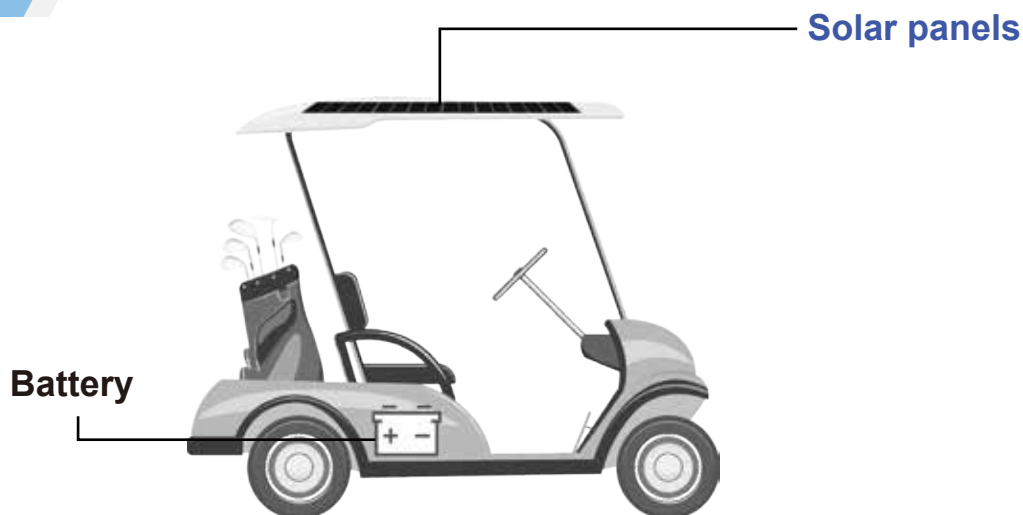
High-Efficiency Panel

Eco-Worthy mono solar panels provide up to 21% electricity conversion efficiency gaining more power for your boat battery.

Deep-Cycle LiFePO4 Lithium Battery

Unlike lead-acid batteries, lithium batteries allow you to use 100% capacity in each cycle, making those devices run for longer.

Golf cart



Easy Solar for Golf Cart

Environment Benefits

Solar energy is clean. No carbon dioxide is released into the atmosphere as it is when batteries are plugged into the wall to charge. Similarly, no fossil fuels are consumed as they are in gas-powered golf carts.

Financial Benefits

Solar panels for your golf cart is a brilliant idea that'll allow you to charge it with freely available solar energy. Each charge can provide a long run time while reducing the usual maintenance costs.

Electric forklift



Battery for Electric Forklift

Easier to Use

A lithium battery is lightweight and ... 50-60% lighter than the lead-acid equivalent, so you can take it anywhere you like. For instance, a 100ah lead-acid battery is 29kg while a 100ah lithium battery weighs 10.5kg.

Longer Life

The numbers vary from study to study, but lithium batteries generally last for several times the number of cycles as lead-acid batteries, leading to a longer effective lifespan for lithium products.

ECO-SOURCES PRODUCT CATALOG



Lithium Battery

10Ah - 280Ah Lithium Iron
Phosphate Batteries



Solar Panels

12V Solar Panels



Inverter

1100W 2200W Inverter



Solar Inverter Charger

1500W 3000W 5000W



Solar Fan

Solar Powered Fan

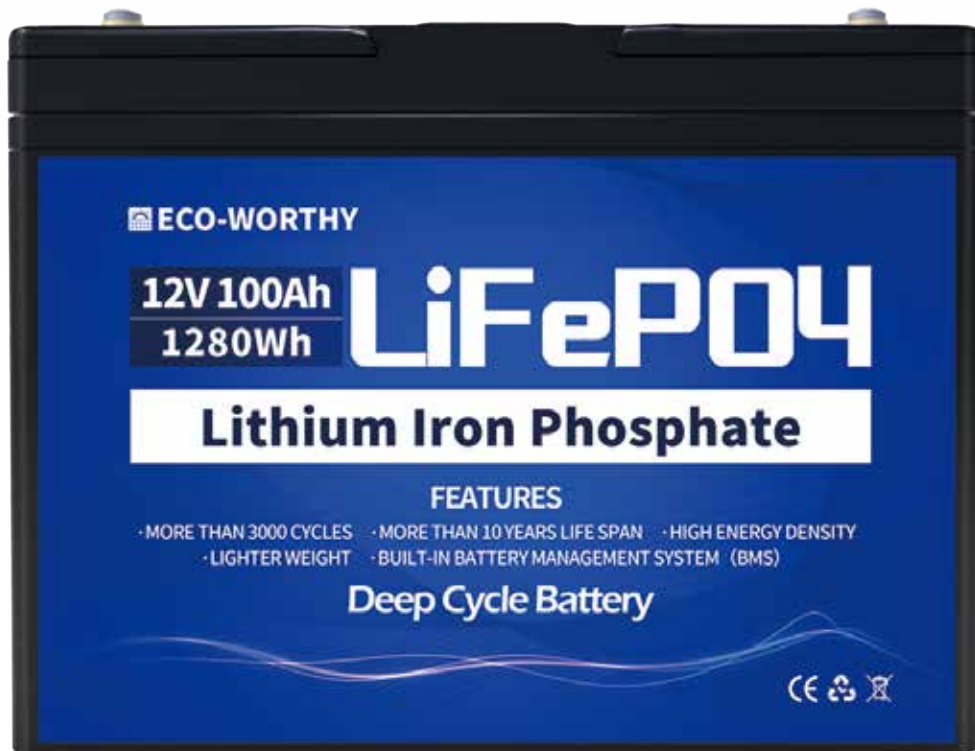


Solar Panel Mounting Brackets



LITHIUM BATTERY SPECIFICATIONS

LiFePO4 / Lithium Iron Phosphate Battery

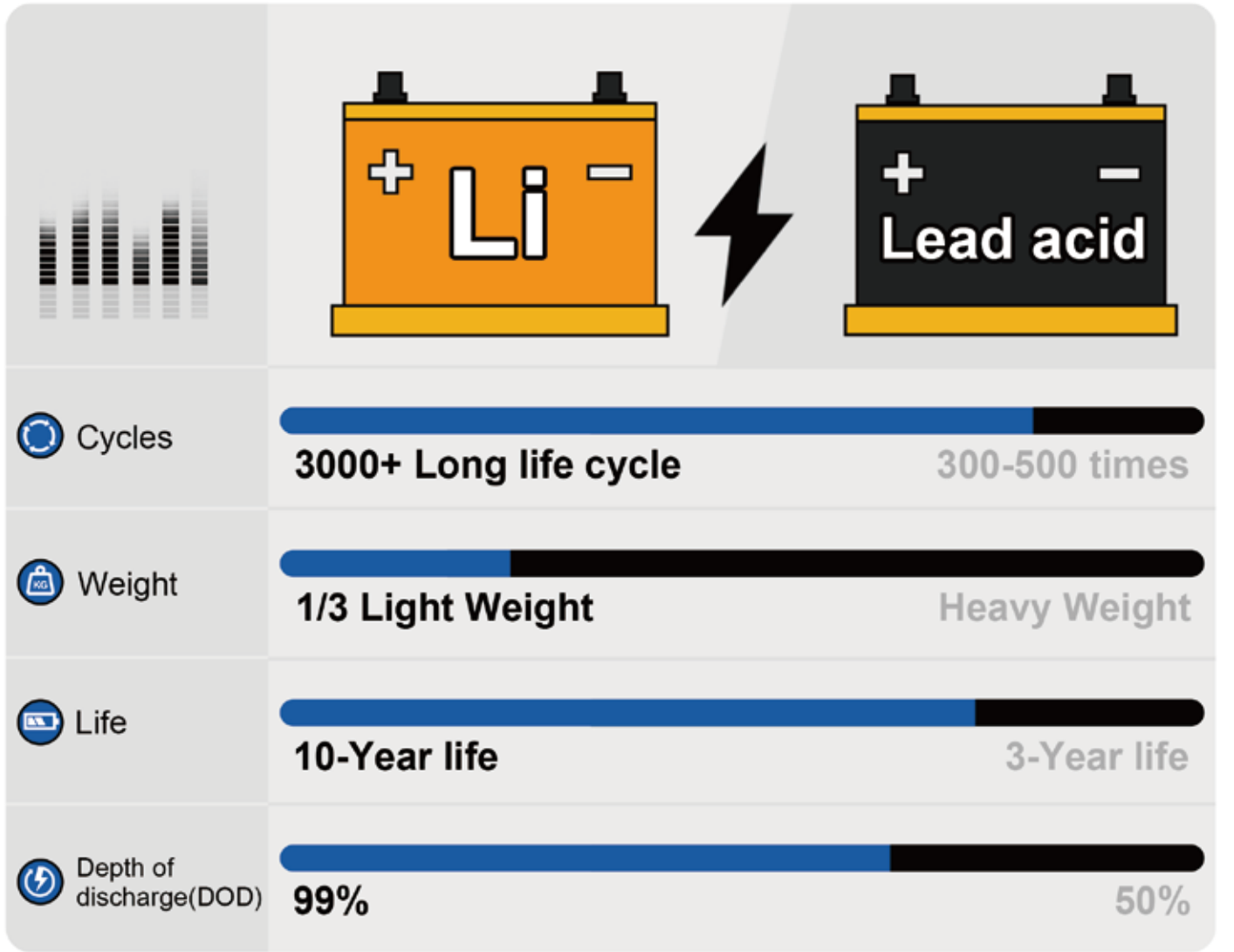


[Long life cycle] - The lithium rechargeable battery cycles more than 3000 times, which is more than 8 times compared to lead-acid batteries.

[BMS protection] - The lithium iron phosphate battery has an excellent BMS (Battery Management System), which can prevent its over and under voltage, overcurrent, high temperature, and short circuit protections.

[Smaller and lighter] - Lithium batteries are smaller, and their weight is generally less than lead-acid batteries. It is an ideal choice for powering outdoor campsites and for easy indoor installation.

The Perfect Replacement for Lead-Acid Batteries



Self-Heating Function



ECO-WORTHY®

ARCTIC

Suitable up to **-30 °C**
Melt the Ice

✓ Suitable up to 30 °C

The new ECO-Worthy battery is the first LiFePO4 battery, which can be used even at arctic temperatures up to -30 degrees. Other lithium batteries cease to function at a temperature of 0°C.

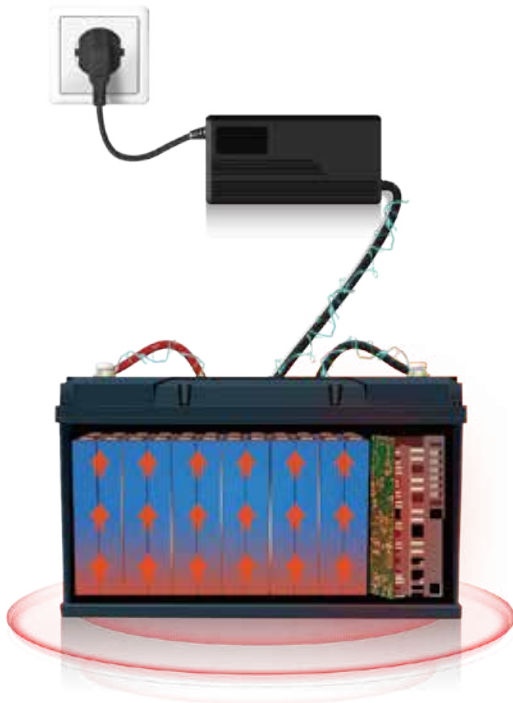
✓ Controlled By BMS

The system is controlled fully automatically by the battery management system (BMS), which keeps the cell temperature just above freezing point through the charging current in order to enable the battery to be used under extreme conditions.

✓ Workable In ARCTIC Environment

This makes the eco-worthy the optimum solution for traveling to cooler environments or for installing the battery in the unheated part of the vehicle, such as in the battery compartment.

They are available with all ECO-worthy battery model.



High Performance Water&Dust Resistance



✓ IP67 Protection

The new ECO-Worthy Marine Batteries conform to the IP67 protection class and are ideal for use on boats and yachts.

By complementing the ECO-Worthy Lithium Iron Phosphate cells (LiFePO4) with a robust, dustproof, and waterproof casing, these batteries defy the harshest environmental conditions. Whether it's mechanical shocks, vibrations, moisture, or dirt, the batteries of the ECO-Worthy Marine Series deliver consistently strong lithium performance.

✓ Temporary Submersion available

Even temporary submersion poses no threat to this battery. It can easily be put back into operation afterward. The smart battery management system protects the terminals and automatically shuts down in such cases.

✓ Light weight AGM battery Replacement

There are many reasons to switch from traditional AGM or Gel technology to a ECO-Worthy Marine Battery. In addition to higher usable capacity, the lithium battery is also a true lightweight, weighing only about 1/3 compared to lead-acid batteries. The modular design allows for component replacement as needed, making it particularly eco-friendly.

They are available with 12.8 or 25.6 volts and capacities of 100, 150, 200 or 260 Ah.



ECO Worthy SMART BMS (Battery Management System)



✔ Smart Internal Battery Management System (BMS) protects against:

- Over and under voltage
- Over and under temperature
- Charge and discharge over current
- Short circuit
- Equalize Voltage
- Communication UART/RS485/RS232/CAN

They are available with all ECO-worthy battery model.

ECO Worthy Bluetooth



✔ Integrated Bluetooth monitoring. Always know your battery status.

With the integrated Bluetooth 4.0 monitoring, you always have all important battery data in view on your smartphone or tablet. Among other things, the app displays the following data in real-time:

- Battery state of charge in % (SoC)
- Battery voltage
- Charge / discharge current
- Remaining capacity
- Battery temperature
- Number of charge / discharge cycles
- Rated- / capacity

To connect the battery and a smartphone / tablet, the device must support Bluetooth version 4.0.

✔ Secure lithium technology.

Completely secure and hassle-free. Our batteries utilize advanced lithium iron phosphate technology (LiFePO₄), known for being the safest lithium technology available today. Furthermore, our tailor-made casings and electronic components enhance safety and longevity.

Each battery comprises a high-performance lithium iron phosphate (LiFePO₄) cell along with an integrated Battery Management System, or BMS for short. This BMS continually monitors the condition of individual cells, safeguarding against overcharging, excessive voltage, overheating, and other potential issues. The BMS proactively prevents premature storage tank failure resulting from environmental factors or improper usage.

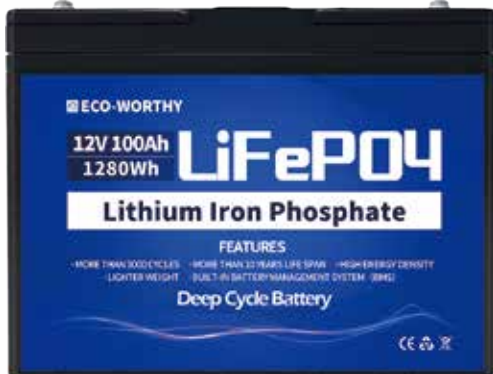
Bluetooth 4.0



Bluetooth APP



Lithium Battery



Features



BMS protection



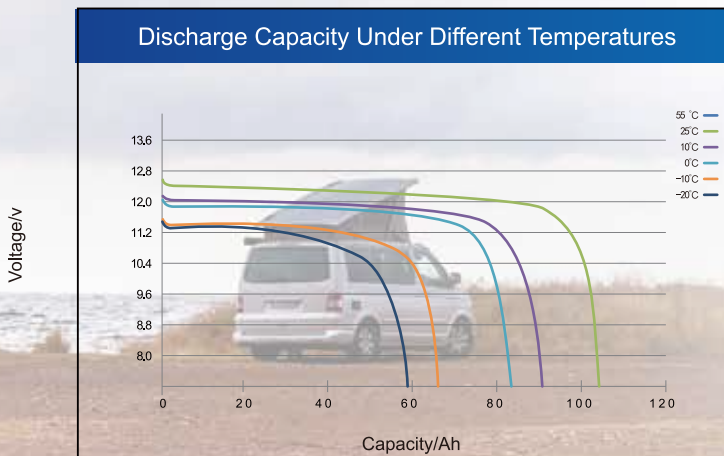
3000+ deep cycles



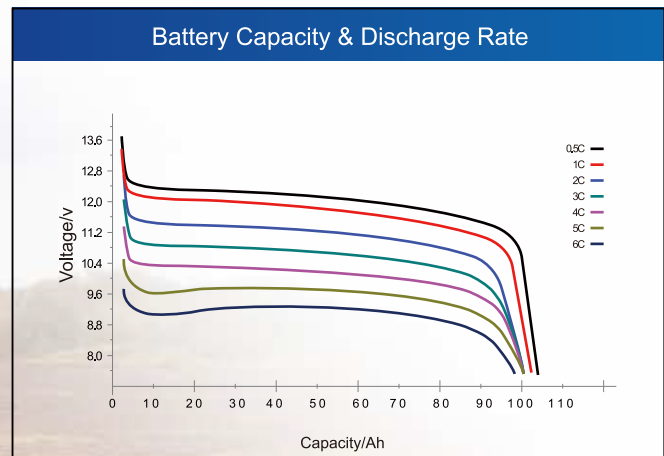
10-year warranty

Battery	12V 50AH	12V 100AH	12V 150AH	12V 200AH	24V 100AH	48V 50AH
Voltage (V)	12.8	12.8	12.8	12.8	25.6	51.2
Current (A)	50	100	100	150	100	60
Capacity (Ah)	50	100	150	200	100	50
Energy (Wh)	640	1280	1920	2560	2560	2560
Weight (lbs/kg)	6.07	11	14.1	19	18.76	18.21
Size (inch/mm)	232*135*181 9.1*5.3*7.1	260*168*214 10.2*6.6*8.4	330*175*215 13*6.9*8.5	365*194*252 14.4*7.6*9.9	365*194*252 14.4*7.6*9.9	365*194*252 14.4*7.6*9.9

Discharge Capacity Under Different Temperatures



Battery Capacity & Discharge Rate



12V Series

Battery	Continuous Current(A)	Rated Voltage(V)	Capacity (Ah)	Energy (Wh)	BMS Protections	Weight (lbs/kg)	Size (inch/mm)	Terminal Type	Case Material
12V 10Ah	10	12.8	10	128	overcharge/ over-discharge/ over-temperature	1.1	6*2.6*3.8 152*65*96	F2	ABS
12V 20Ah	25	12.8	20	256	overcharge/ over-discharge/ over-temperature	2.6	7.2*3*6.7 182*77*170	M5	ABS
12V 30Ah	25	12.8	30	384	overcharge/ over-discharge/ over-temperature	3.55	7.2*3*6.7 182*77*170	M5	ABS
12V 50Ah	50	12.8	50	640	overcharge/ over-discharge/ over-temperature	5.74	9.1*5.3*7.1 232*135*181	M6	ABS
12V 100Ah	100	12.8	100	1280	overcharge/ over-discharge/ over-temperature/ low-temperature	11	10.2*6.6*8.4 260*168*214	M8	ABS
12V 150Ah	120	12.8	150	1920	overcharge/ over-discharge/ over-temperature	13.4	13*6.9*8.5 330*175*215	M8	ABS
12V 200Ah	150	12.8	200	2560	overcharge/ over-discharge/ over-temperature/ low-temperature	18	14.4*7.6*9.9 365*194*252	M8	ABS
12V 260Ah	250	12.8	260	3328	overcharge/ over-discharge/ over-temperature	29	21*9.5*8.8 533*241*224	M8	ABS
12V 280Ah	250	12.8	280	3584	overcharge/ over-discharge/ over-temperature	29	21*9.5*8.8 533*241*224	M8	ABS

24V Series

Battery	Continuous Current(A)	Rated Voltage(V)	Capacity (Ah)	Energy (Wh)	BMS Protections	Weight (lbs/kg)	Size (inch/mm)	Terminal Type	Case Material
24V 50Ah	50	25.6	50	1280	overcharge/ over-discharge/ over-temperature	11	10.2*6.6*8.4 260*168*214	M8	ABS
24V 100Ah	100	25.6	100	2560	overcharge/ over-discharge/ over-temperature	18.76	14.4*7.6*9.9 365*194*252	M8	ABS

48V Series

Battery	Continuous Current(A)	Rated Voltage(V)	Capacity (Ah)	Energy (Wh)	BMS Protections	Weight (lbs/kg)	Size (inch/mm)	Terminal Type	Case Material
48V 50Ah	50	51.2	50	2560	overcharge/ over-discharge/ over-temperature	17.21	14.4*7.6*9.9 365*194*252	M8	ABS

Outdoor Series

Battery	Continuous Current(A)	Rated Voltage(V)	Capacity (Ah)	Energy (Wh)	BMS Protections	Weight (lbs/kg)	Size (inch/mm)	Terminal Type	Case Material
12V 20Ah	25	12.8	20	256	overcharge/ over-discharge/ over-temperature	2.2	8.7*4.4*4.6 221*113*117	M5	ABS+PC



100AH 12V Lithium Battery

Technology

FEATURES:

- Can be used with lithium compatible Eco Worthy! solar, inverters and charge controllers
- Max Power Capacity; carries almost double the power of regular batteries
- Lightweight
- CE Certified
- Quick charging
- Smart Internal Battery Management System (BMS) protects against:
 - Over and under voltage
 - Over and under temperature
 - Charge and discharge over current
 - Short circuit
- Drop-in replacement for Group 24 Lead Acid or AGM batteries
- 10-year Lifespan

Lithium Iron Phosphate (LiFePO4)

Nominal Voltage	12.8 V
Rated Capacity	100Ah
Absorption Voltage	14.2 to 14.4 V
Float Voltage	14.0 to 14.2 V
Equalize Voltage (if applicable)	14.2 to 14.4 V (same as absorption)
Absorption Time	60 to 120 minutes
Temperature Compensation	No
Charge Cut-off Voltage	14.6 V
Discharge Cut-off Voltage	8.4 V
Recommended Charge Current	50A
Maximum Charge Current	100A
Maximum Discharge Current	100A (continuous) 120A (30 minutes) 200A (5 seconds)
Bluetooth connection	No
Self Heating	No
IP Standard	IP47
BMS Protection	High/low voltage Short circuit High/low temperature Cold charging
Internal Resistance	≤ 7.5 mΩ
BMS Leakage Current	≤3mA
Operating Temperature Charge	32°F (0°C) to 131°F (55°C)
Discharge	-4°F (-20°C) to 131°F (55°C)
Storage Temperature 1 Week	-4°F (-20°C) to 122°F (50°C)
1 month	-4°F (-20°C) to 113°F
Storage	-4°F (-20°C) to 104°F (40°C)
Humidity Operating:	5% to 90 % RH
Storage:	45% to 85% RH
Certifications UN 38.3; CE; UL 2054	
Cycle Life	3000-5000 cycles
Product Lifespan	10-year (Prorated)

Up to 16 batteries can be connected in series or parallel to form a 48V battery pack



IN Parallel Connection
12 Voltage



IN Series
48 Voltage

Unit Dimensions



Mechanical

Length	10.2 in / 260 mm
Width	6.6 in / 168 mm
Height	8.2 in / 209 mm
Weight	25.5 lbs / 11.6 kg
Terminals	M8 insert

Materials

Case and Cover	ABS
Color	BLACK

PLEASE NOTE

Lithium batteries ship under Class 9 Dangerous Goods PI 965 Section IA, Please contact your carrier company to determine their requirements for shipping. MSDS Sheets are available upon request

Bluetooth Lithium LiFePO4 Battery



Features



BMS protection



6000 Deep cycle



Bluetooth & APP

Capacity	280Ah
Energy (Wh)	3584
Rated Voltage (V)	12.8
Voltage Range (V)	10~14.6
Maximum Continuous Charging Current (A)	200
Maximum Continuous Discharging Current (A)	200
Charing Voltage (V)	14.6
Demensions (in/mm)	533*241*224/21*9.5*8.8
Weight (lbs/kg)	63.93/29
Charging Temperature (°F/°C)	0~55
Discharging Temperature (°F/°C)	-20~55
Advanced Function	Bluetooth module low-temperature protection



12V MONOCRYSTALLINE SOLAR PANEL

High Efficiency Module



[Versatile] - Basic generator component for 12V/24V battery charging for on-grid, off-grid, and hybrid power systems for home, garden, RV, marine, and agriculture.

[Durable] - Withstands high wind (2400Pa) and snow loads (5400Pa), the surface is made up of 3.2mm low iron glass, the monocrystalline modules are framed by 35mm width aluminum alloy, which is 2~5mm wider than other brands.

[Feature] - Each solar panel comes with a pair of 35 inch cables. By-pass diodes are pre-installed in a waterproof IP-65 rated junction box to minimize power drop caused by shade and ensure excellent performance in low-light environments.

[Easy to Install] - Plug & play designed connectors on the cables for quick installation and pre-drilled holes on the back of the panel to allow for fast mounting onto roofs or brackets.

Solar Panel



Features



21% Efficiency



IP65 waterproof



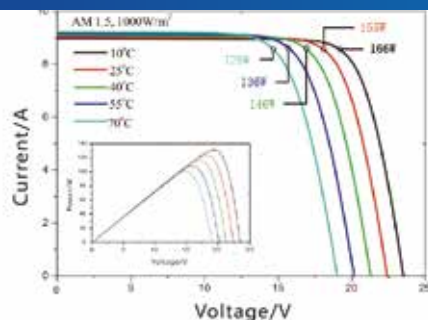
25 year
80% output warranty

Brackets (Optional)

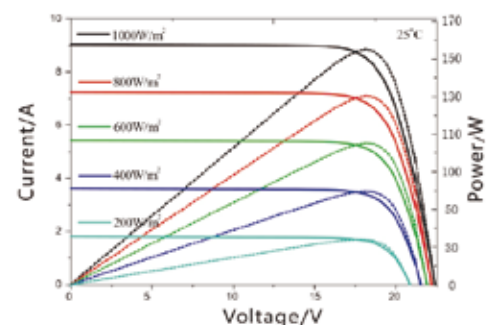


Rated Power	100W	195W
Solar Cell	Monocrystalline	Monocrystalline
Maximum/Peak Voltage (V)	20.20V	18.V
Open Circuit Voltage (V)	24.50V	21.6V
Short Circuit Current (A)	5.20A	10.83A
Maximum Current (A)	4.95A	11.89A
Output Tolerance (%)	±3	±3
Temperate Coefficient of Isc (%/C)	(010+/-0.01)	(010+/-0.01)
Temperate Coefficient of Voc (%/C)	-(0.38+/-0.01)	-(0.38+/-0.01)
Temperature Range (C)	-40~+85	-40~+85
Frame	Aluminyum alloy frame	Aluminyum alloy frame
Weight (lbs/kg)	11.46/5.20	21.47/9.74
Size (inch/mm)	39.8*18.1*1.4 1010*460*35	58.3*26.3*1.4/ 1480*668*35

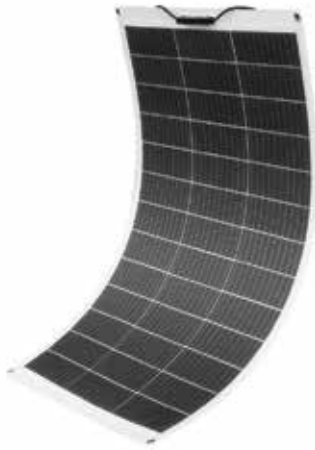
I-V Curves



I-V Curves



Flexible Solar Panel



Features



21% Efficiency



IP65 waterproof



30° flexibility

Rated Power	130W
Solar Cell	Monocrystalline
Maximum/Peak Voltage (V)	21.10V
Open Circuit Voltage (V)	24.50V
Short Circuit Current (A)	6.50A
Maximum Current (A)	6.16A
Output Tolerance (%)	±3
Temperate Coefficient of Isc (%/°C)	010+/-0.01
Temperate Coefficient of Voc (%/°C)	-(0.38+/-0.01)
Temperature Range (°C)	-40 ~ +85
Length of Extension Cable (ft/mm)	2.95/900
Size of Extension Cable	4mm ² (11AWG / MC4 Connector)
Weight (lbs/kg)	4.40/2.0kg
Size (in/mm)	37.8*27.1*0.1/960*690*2.5



Start Battery Panel



Features



21% efficiency



IP65 waterproof



Start battery maintainer

Rated Power	25W
Solar Cell	Monocrystalline
Maximum/Peak Voltage (V)	18
Open Circuit Voltage (V)	22.41
Short circuit current (A)	1.54
Maximum current (A)	1.4
Output Tolerance (%)	±3
Temperate Coefficient of Isc (%/°C)	(0.10+/-0.01)
Temperate Coefficient of Voc (%/°C)	-(0.38+/-0.01)
Temperature Range (°C)	-40 ~ +85
Frame	Aluminum alloy frame
Length of Wxtension Cable (ft/mm)	3.28/1000
Size of Extension Cable (mm ² /AWG)	0.75/18
Size (in/mm)	16.5*12.6*0.7/420*320*17



Solar Trickle Charger



Features



Battery maintenance



IP65 waterproof



Cigar lighter adapter

Rated Power	5W	10W
Solar Cell	Monocrystalline	Monocrystalline
Maximum/Peak Voltage (V)	18.7	18.7
Open Circuit Voltage (V)	22.41	22.41
Maximum Current (A)	0.28	0.575
Over-charged Protection Voltage (V)	14.5	14.5
Over-charged Recovery Voltage (V)	13.0	13.0
Length of Extension Cable (cm/ft)	150/1.64	150/1.64
Length of Alligator Clips Cable (cm/ft)	50/4.92	50/4.92
Length of Cigarette Lighter Plug Cable (cm/ft)	50/4.92	50/4.92
Weight (lbs/g)	0.4/185	0.7/320
Size (mm)	7.9*7.9*0.47 /200*200*12	11*10*0.47 /280*260*12

Portable Solar Panel



Features



Foldable



Power station
compatibility



25 year
80% output warranty

	120W	100W
Rated Power	120W	100W
Solar Cell	Monocrystalline	Monocrystalline
Maximum/Peak Voltage (V)	18	18
Open Circuit Voltage (V)	21.6	21.6
Short Circuit Current (A)	7.1	5.9
Maximum Current (A)	6.67	5.6
Solar Panel Extension Cable	3 meters, 5.5*2.1mm	3 meters, 5.5*2.1mm
Output Tolerance (%)	±3	±3
Temperate Coefficient of Isc	(010+/-0.01)%/°C	(010+/-0.01)%/°C
Temperate Coefficient of Voc	-(0.38+/-0.01)%/°C	-(0.38+/-0.01)%/°C
Temperature Range (°C)	-40 ~ +85	-40 ~ +85
Weight (kg/lbs)	9/4.1	9/4.1
Folded Size (inch/mm)	21.5*14.6*2.5 / 546*371*63	21.5*14.6*2.5 / 546*371*63
Unfolded Size (inch/mm)	62.2*21.5*0.2 / 1578*7546*5	62.1*21.5*0.2 / 1578*546*5





ECO-WORTHY[®]

1100W/2000W

Off-Grid Inverter



[Pure Sine Wave Inverter] - Superior to the modified sine wave inverters, protect appliance life, and are without electromagnetic pollution.

[LCD Display & Smart Fan] - Easily check the remaining battery voltage, maximizes your duration of electricity; Smart cooling fan for saving energy and to protect the inverter.

[Designed for Off Grid] - Can be used for cars, RVs, Trailers, Camping, Homes, Boats, Cabins, Farm, etc.

Inverter



Features



Pure sine wave



Smart cooling



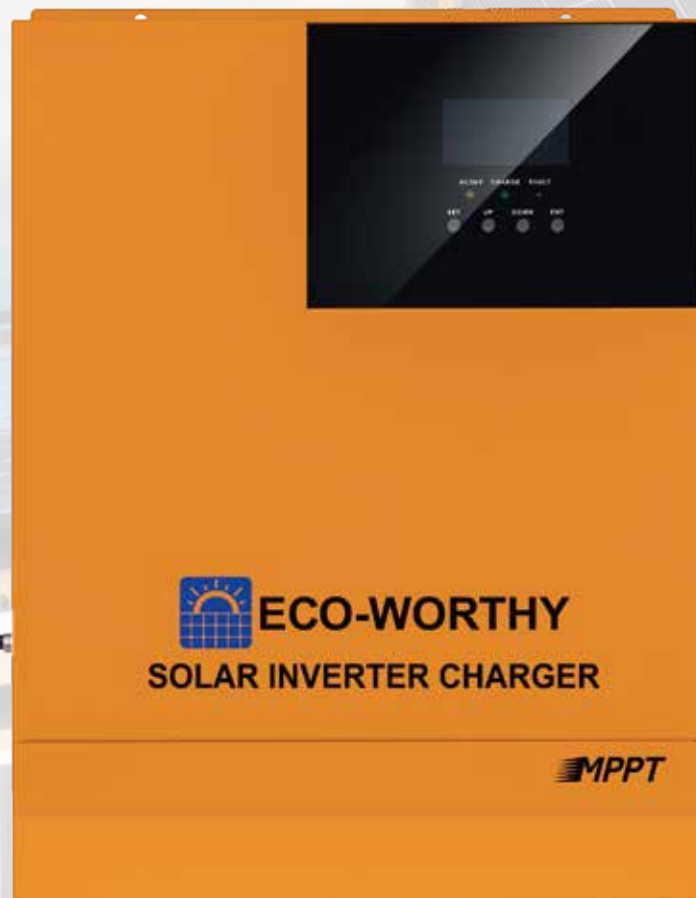
Built-in fuse

Rated Power	1100W	2000W
Output Continuous Watts (W)	1100W+18W USB	2000W+18W USB
Rated Input DC (V.A)	12V Battery,100A	12V Battery,200A
Input Voltage Range	10.5 to 16V DC+/-0.3V	10.5 to 16V DC+/-0.3V
Rated Frequency (Hz)	60Hz±1	60Hz±1
Rated Output AC (V.A)	115v+/-10%,9.5A	115v+/-10%,9.5A
Rated Output USB (V.A)	2*USB	2*USB
NO Load Current	<1A DC	<1.2A DC
Optimum Efficiency	85% min.	85% min.
Fuse (A)	30A*4	40A*6
Fuse Type	Internal Blade	Internal Blade
Output Wave Form	Pure Sine Wave	Pure Sine Wave
Touch Temperature	65 °C (149 °F)Max.	65 °C (149 °F)Max.
Operating Temperature	-20 to 40 °C (4 to 104 °F)	-20 to 40 °C (4 to 104 °F)
Operating/Storage Humidity RH	5 to 95%	5 to 95%
Cooling System	Thermo Fan	Thermo Fan
THD	<4.5%	<4.5%
Dimensions L*W*H (in/mm)	13.5*9.8*4.1/342*249*104	16.8*9.8*4.1/427*249*104
Assembled Weight (lbs/kg)	8.05/3.65	10.89/4.94



1500W-5000W

Solar Inverter Charger

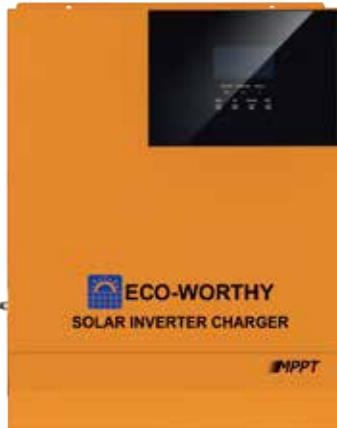


[Hybrid Inverter] - The combination of pure sine wave inverter and MPPT controller provides stable output for your appliances, reduce the wires in your solar power, more than 95% efficiency, maximize energy usage, and protects your battery from short circuit, overvoltage and under voltage, overload, and reverse polarity.

[Battery Charging] - Compatible with most batteries, such as Lead-Acid, AGM, NCM, Flooded, and Lithium batteries. Charges the 48v battery group with bulk and floating states (hybrid inverter can only works when 48v battery bank is connected).

[UPS Function] - Four charging modes to keep your battery's backup capacity, and three output modes to auto switch between mains and battery; to supply your appliances without interruption by both battery and mains power.

Solar Inverter Charger



Features



All-in-one design

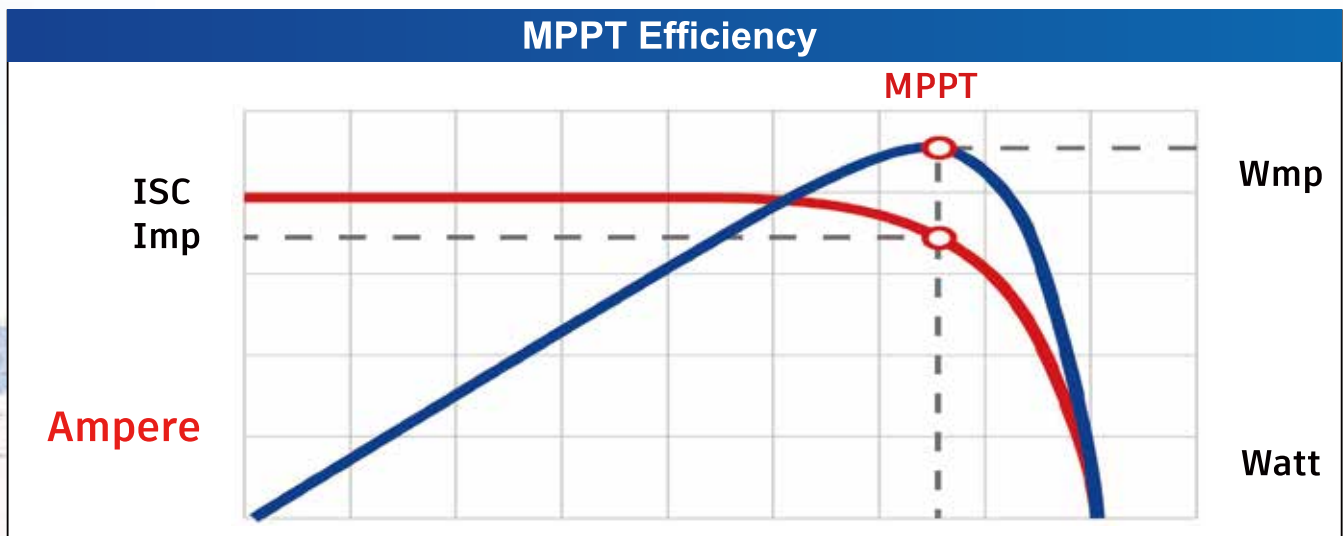


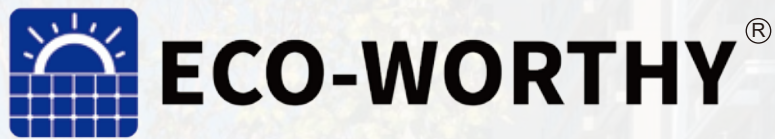
High efficiency



Stable performance

Model	3000W 24V-120V	5000W 24V-120V
Output Waveform	Pure sine wave	Pure sine wave
Solar Input Voltage Range (Vdc)	170~280	120~500
Maximum PV Array Wattage (W)	1400	5000
Maximum Solar Charge Current (A)	60	80
AC Input Voltage Range (Vac)	110/120	110/120
Battery Charge Type	MPPT	MPPT
AC Output Voltage (Vac)	120	120
AC Output Frequency (Hz)	60	60
Size (in/mm)	14.9*11*4/378*280*103	16.8*12.7*4.9/426*322*126
Weight (lbs/kg)	15/6.8	24/10.9





SOLAR POWERD

Solar Powered Fan



[Well-Made Material] - The material of this solar attic ventilator is stainless steel which provides longevity to the fan and prevents any rust from forming.

[Wide Application] - It is the perfect solar powered exhaust fan for sheds, roof, attic, RV, boats, cabin, etc.

[Easy Installation] - The solar attic fan has pre-drilled mounting holes, self-tapping screws for easy installation. It is a ready-to-use solar fan, just take it out of the box, with no need for any extra wiring.

5W Round Solar Vent



Features



Automatic operation



Easy installation



Effective ventilation



Model	5W Round Solar Vent	
Solar panel	Maximum power (P)	5W
	Maximum voltage (Vpm)	5
	Maximum current (Ipm)	1
Battery motor	Size (inches)	φ 9.65
	Battery capacity (Ah)	2.8
	Motor type	Commutator motor
Blade	Motor power	5V 0.5 W
	Motor life	Over 1000 hours
	Blade material	Polypropylene
	Blade size (inches)	6
Fan	Case material	ABS + PC
	Features	Exhaust only, DC port power supply
	Diameter * Height (in/cm)	φ12.01*5.91/φ30.5*15
Function	Charging method	Solar panel/DC

5W Square Solar Vent



Features



Solar energy



Easy installation



Effective ventilation



Model	5W Square Solar Vent	
Solar panel	Irradiance and cell temperature	1000w /m ² am1.525 °c
	Maximum power (P)	5W
	Maximum voltage (Vpm)	5
	Maximum current (Ipm)	1
Battery motor	Size (inches)	13.39 * 13.39
	Battery capacity (Ah)	6
	Motor type	Commutator motor
Blade	Motor power	5V 0.5 W
	Motor life	Over 1000 hours
	Blade material	Polypropylene
	Blade size (inches)	7
Fan	Case material	ABS + PC
	Features	Exhaust, DC port power supply
	Length * Width * Height (in/cm)	16.34*16.34*6.89/41.5 * 41.5 * 17.5
Function	Charging method	Solar panel/DC

10W Square Solar Vent

Features



Solar energy



Easy installation



Effective ventilation



Model	10W Square Solar Vent	
Solar panel	Irradiance and cell temperature	1000 w / m ² am1.5 25 ° C
	Maximum power (P)	10W
	Maximum voltage (Vpm)	18
	Maximum current (Ipm)	1
Battery motor	Size (inches)	13.39 * 13.39
	Battery capacity (Ah)	12
	Motor type	Commutator motor
Blade	Motor power	10W 12V
	Motor life	Over 1000 hours
	Blade material	Polypropylene
Fan	Blade size (inches)	9
	Case material	ABS + PC
	Features	Exhaust, DC port power, lighting
Function	Length * Width * Height (in/cm)	16.34*16.34*6.89/41.5 * 41.5 * 17.5
	Charging method	Solar panel/DC

Solar Vent (without Battery)

Features



Solar energy



Easy installation



Effective ventilation

Solar Panels	5W
Air Flow Capacity (CFM)	200
Weight (Pounds)	3.78
Working Volume (db)	55
Color	Black
Material	Alloy Steel
Package Dimensions (in/mm)	11.2*10.3*3.8/286*262*97



Solar Vent SV-B (with Battery)

Features



Automatic operation










Easy installation







Effective ventilation

Solar Panels	2W	5W
Weight (pounds)	2.14	/
Working Volume (db)	55	55
Air Flow Capacity	11.6 Cubic Feet	22.6 Cubic Feet
Package Dimensions (in/mm)	10.8*10.8*4/274*274*101.5	12*12*4.5/305*305*115




RV Solar System Reference

Illustration	Type	Appliances	Power Consumption (Daily)	Suitable Solar Panel Kit	Solar Panel Amount	Suitable Battery Bank	Battery Amount
	Class A Motorhome	TVs, LED bulbs, refrigerator, air conditioner, induction cooker, coffeemaker, water heater	10-15 kwh	2-4kw system	20*100w solar panels or 10*200w solar panels	8-12kwh	8*12v 100ah batteries or 4*12v 200ah batteries
	Class B Motorhome	Refrigerator, lighting, fan, notebook, kettle	2.5-3 kwh	200-400w system	2*100w solar panels or 2*200w solar panels	1-2kwh	1*12v 150ah battery or 2*12v 100ah batteries
	Class C Motorhome	Refrigerator, microwave, coffeemaker, water heater, TV, lighting, fan, notebook, air conditioner	8-10 kwh	600-1200w system	6*100w solar panels or 6*200w solar panels	4-6kwh	4*12v 100ah batteries or 2*12v 150ah batteries
	5th wheel Trailer	Refrigerator, microwave, induction cooker coffeemaker, water heater, TV, lighting, fan, notebook, air conditioner	8-12 kwh	800-2000w system	8*100w solar panels or 8*200w solar panels	8-12kwh	8*12v 100ah batteries or 4*12v 200ah batteries
	Travel Trailer	Refrigerator, microwave, coffeemaker, water heater, TV, lighting, fan, notebook, air conditioner	3-5 kwh	200-900w system	2*100w solar panels or 4*200w solar panels	3-5kwh	4*12v 100ah batteries or 2*12v 150ah batteries
	Pop-up Trailer	Refrigerator, lighting, fan, notebook, kettle	1-2 kwh	100-300w system	1*100w solar panels or 2*100w solar panels	1-2kwh	2*12v 100ah batteries or 1*12v 150ah battery
	Truck Camper	Refrigerator, lighting, fan, water heater, kettle	2-3 kwh	400-600w system	4*100w solar panels or 2*200w solar panels	2-3kwh	2*12v 100ah batteries or 1*12v 200ah battery

Boat Solar System Reference

Illustration	Type	Appliances	Power Consumption (Daily)	Suitable Solar Panel Kit	Solar Panel Amount	Suitable Battery Bank	Battery Amount
	Kayak	Trolling motor, fish finder	300-600 wh	100w system	1*100w solar panel	300-600wh	1*12v 50ah battery
	Cabin Cruiser	Refrigerator, radar, notebook, auto cruise system, lighting, radio	1.2-1.8 kwh	200-400w system	4*100w solar panels or 2*200w solar panels	1.2-2kwh	1*12v 100ah battery or 1*12v 150ah battery
	Sailboat	Refrigerator, radar, notebook, lighting, radio	1.2-1.8 kwh	200-400w system	4*100w solar panels or 2*200w solar panels	1.2-2kwh	1*12v 100ah battery or 1*12v 150ah battery
	Yacht	Refrigerator, lighting, radio, TV, microwave, water heater	4-8 kwh	800-1200w system	8*100w solar panels or 6*200w solar panels	4-8kwh	2*12v 200ah batteries or 4*12v 150ah batteries

Golf Cart System Reference

Illustration	Size	Roof Size	Suitable Kit	Panel Size (Single)	Daily Power Generation
	2 Seat	54*48in	100W kit (1*100W solar panel)	38.6*21in	400Wh (Under 4 hours full sunshine)
	4 Seat	80*48in	200W kit (2*100W solar panel)	38.6*21in	800Wh (Under 4 hours full sunshine)
	6 Seat	116*48in	400W kit (2*195W solar panel)	58.2*26.3in	1600Wh (Under 4 hours full sunshine)

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**Lithium Battery****Solar Panel****Solar Inverter Charger****Solar Vent**

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