

GGXingEnergy®



Camping Hiking Fishing Travelling



### 60W Portable Solar Panels for RV Batteries

With years of experience in production portable solar panels for RV batteries, GGXingEnergy can supply a wide range of portable solar panels for RV batteries. High quality portable solar panels for RV batteries with competitive price can get satisfactions from different markets customers. If you interest in the portable solar panels for RV batteries pricelist, just feel free to provide your mail address for us to send the portable solar panels for RV batteries quotation.

### 60W Portable Solar Panels for RV Batteries

This easy-maintainable GGXingEnergy® 60w portable solar panels for RV batteries is updated with ETFE lamination. It is multifunctional for charging 12v batteries, portable power stations, solar generators, laptops, phones... Besides the full functions, its portable and foldable design can provide huge convenience for outdoor activities.

### 60W Portable Solar Panels for RV Batteries Parameter

#### Solar Panel

Solar Panel Max Power	60 Watt (2 x 30 watt)
Solar Cell Type	A-grade monocrystalline
Solar Cell Efficiency	>22%
Optimum Operating Voltage (Vmp)	18V
Optimum Operating Current (Imp)	3.3A
Open-Circuit Voltage (Voc)	21.6V
Short-Circuit Current (Isc)	3.6A
Output	DC port: 18V3A (max) USB Port: 5V/2.1A (max) QC3.0 Port: 5V9V12V 24W (max) TYPE-C Port: 5V9V12V18W (max)
Test Condition	STC Irradiance 1000W/m <sup>2</sup> , TC=25°C, AM=1.5
Operating Temperature	14°F – 149°F (-10°C – +65°C)
Material	ETFE + EVA layer + Solar Cell + PCB backer sheet + Canvascloth cover
Extended Size	32*21.2* 0.4 inches
Folded Size	21.2* 14.2 * 1.2 inches
Weight	2.5 kg (5.5lb)
Color	Black / Camouflage
Certification	CE / RoHS
Warranty	1 year

## Solar Controller

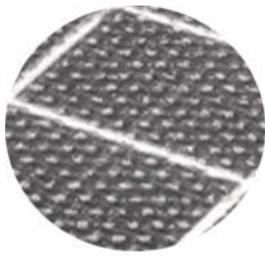
Battery Voltage	12V 24V Auto (Here matching the 60w solar panel, please only use for 12V battery.)
Battery Type	12V lead-acid battery, 12V ternary lithium battery, 12V LFP battery
Working Mode	PWM
Charging Current	10A
Discharging Current	10A
Max Solar Input	23V (for 12V battery)
Equalization	Lead-acid: 14.4V, nonadjustable Ternary lithium: 12.6V, nonadjustable LFP: 14.6V, nonadjustable
Float Charge	Lead-acid: 13.7V, adjustable 13V-15V Ternary lithium: 12.0V, adjustable 11.5V-12.5V LFP: 13.8V, adjustable 13V-14.5V
Discharge Stop	Lead-acid: 10.7V, adjustable 9.5V-11.5V Ternary lithium: 9.0V, adjustable 8.5V-9.5V LFP: 10.0V, adjustable 9.5V-10.5V
Discharge Reconnect	Lead-acid: 12.6V, adjustable 11.5V-13V Ternary lithium: 10.5V, adjustable 10V-11V LFP: 12V, adjustable 11.5V-12.5V
USB Port	2 x USB, 5V2A (max)
Self-consume	<10mA
Operating Temperature	-35°C~+60°C
Size	133*70*35mm
Weight	140g
Certification	CE, RoHS

**60W Portable Solar Panels for RV Batteries Feature**

1) New ETFE solar panels with 22% high efficiency

Not general PET film, but new ETFE craft. It can convert more sunlight, because it is with higher transparency and also the honey-comb structure can let sunlight be refracted. The ETFE materials can improve the heat and corrosion resistance, so our GGXingEnergy® 60w portable solar panels for RV batteries can get longer service life than the PET one.

The conversion efficiency of our A-grade monocrystalline solar cell can be up to 22%, which allows for higher power generation at the same size. Then such a 60w portable solar panels for RV batteries can be smaller and lighter than the lower efficiency one.



Scratch-Proof

Higher Light  
Transmittance

Durable

Temperature  
Resistant

## ETFE Lamination



### 2) Portable and foldable design easy for carrying

This 60w portable solar panels for RV batteries is 32\*21.2\* 0.4 inches when open. The two solar panels can be very easy folded to 21.2\* 14.2 \* 1.2 inches. Weight is 5.5lb and with a comfortable handle at top. You can easily carry such a portable solar panel.

### 3) Waterproof and durable for outdoor application

The cloth back is with glue to be waterproof and the fabric surface will be sturdy enough even you use it on the rugged ground. The ETFE solar panel surface is easy for clean. When there is dust on it, you can just sprinkle water on it to do a quick clean. Also, it is better to be scratch-proof. The PET surface will be scratched if you touch it with a sharp thing accidentally. What's more, its nice high temperature and corrosion resistance can help the portable solar panels for RV batteries be against quick aging.

### 4) Built on kickstands for better solar charging

Not like some designs, the kickstands are external from the portable solar panels for RV batteries and you will need to install them specially. This 60w portable solar panels for RV batteries is sewed with one kickstand at back of each panel. When you open the portable solar panels for RV batteries and adjust the

kickstands you can make the solar panel face sunshine at a right angle. By this way, the portable solar panels for RV batteries can get 25%-30% more sunlight than lying flat.

### Adjustable Kickstands



5) Suitable for portable power stations or solar generators

Now a portable power station may be necessary for outdoor camping. Thus the chance is very less for you getting the access with wall outlet. So we do suggest to use such a portable solar panels for RV batteries to charge the portable power stations. If a power station battery with 18v input voltage and input current not below 3.3A, it can be charged via this portable solar panels for RV batteries. Here we already attach 4 DC connectors (8.0mm, 5.5x2.1mm, 5.5x2.5mm, 3.5x1.35mm), which can fit most brands of portable power stations on market. And you can also contact us for adding other connector types.

#### Different sizes of DC connectors for most solar generators



6) A supplementary charging source for laptops and notebooks

If your laptop / notebook is powered off when outdoor, you can also use this 60w portable solar panels for RV batteries to charge it. There are 10 different DC connectors for brands of laptops (include above 4 ones for portable power stations). The operation will be very easy. Put the solar panel under direct sunlight, find the right connector for your laptop and finish the connection via the cable port with the portable solar panels for RV batteries, then the charging will go. (If there is no charging or very poor charging, please use it again when sunlight is more brighter.) Normally the laptop itself is with voltage control system, so it can be charged directly by the portable solar panels for RV batteries.

7) Providing smart and quick charging for phone / tablet / power bank...

This 60w portable solar panels for RV batteries is also equipped with USB (5V/2.1A max) / QC3.0 (5V9V12V 24W max) / Type-C (5V9V12V 18W max) outports. It can charge a QC3.0 & PD protocol electronic device or any 5V USB supported items like phone, smart phone, iPhone, iPad, Apple watch, tablet, power bank, PSP, switch, bluetooth, earphone, GPS, music player. The built-in smart chip will distinguish your device automatically and fit the best charging current for it.

8) Powering 12V car / boat / motorhome / camper / caravan/ RV battery or a 12V battery pack for solar system

The package of this 60w portable solar panels for RV batteries includes a 10A PWM solar controller. Using the solar controller to protect the charging for 12v battery, you can extend its lifespan. The solar controller can both charge 12v lead-acid and 12v lithium battery (12v ternary lithium and 12V LFP). You do not need to change a solar controller if for another type of battery. And it is already installed well with connection cable to solar panel and the battery clamps (both 0.5m length for the two parts cables).

## 10A PWM Solar Charge Controller



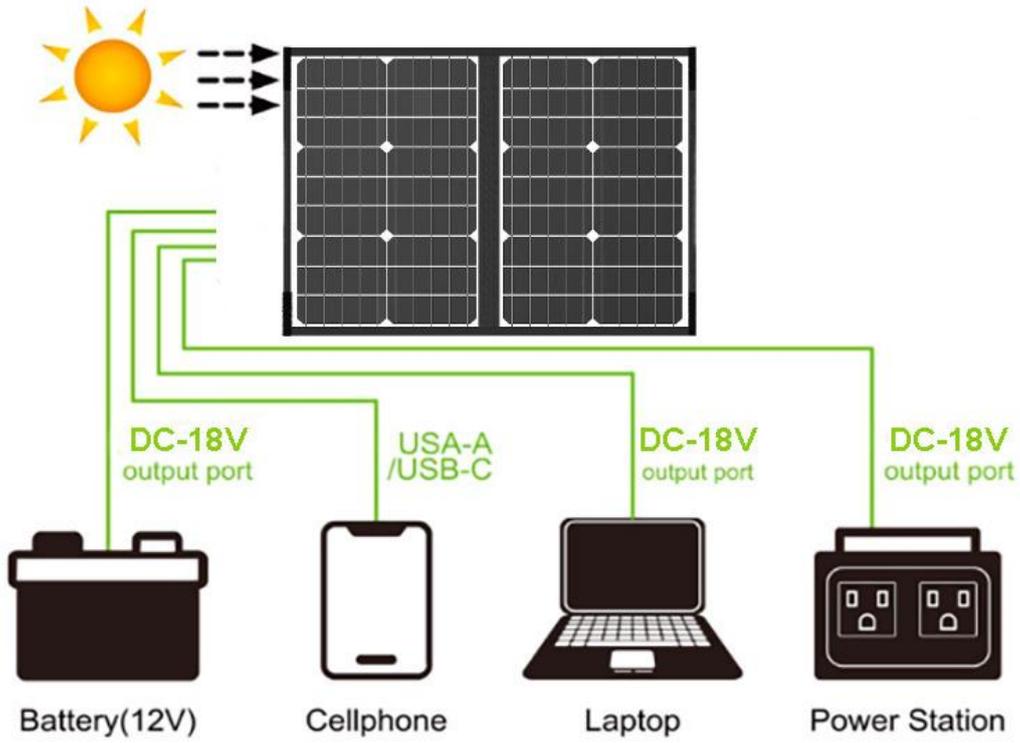
12V Lead-acid Battery



12V Ternary Lithium Battery



12V LFP Battery



Packing & Transport



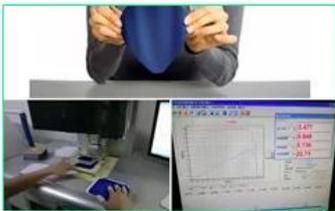
## Exhibition



## Certification



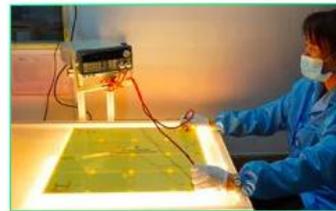
## Production Process



Power output testing for solar cell



Solar panel lamination



Power output testing for solar panel



Pre-production preparation



Sewing on the solar panels



EL testing for foldable solar panel



Power output testing for finished product



Finished products waiting for clean



Finished products waiting for packing