# **Best Solar Car Battery Chargers to Rev Up Batteries**

## **Introduction**

For having a sustainable lifestyle, in the way of extinction, it is a good way to start relying on solar energy systems. There’s a handsome number of car users residing around us and the power they need to charge up the car batteries is huge.

A solar car battery charger is not a full cure for a car’s off function state. But it can efficiently keep it running, so the dependency on other sources are altered. Its function can be of a slow rated one, but its ample significance gives us a remedy.

This kind of charger works as per need, so there’s no wastage of energy. Despite having slow motion its efficiency rate is quite high.

The choice of best solar car battery chargers help you have an effective work experience, which will make you free of tension.

## **Buying Guide**

The Availability of collection for a suitable solar car chargers are bountiful. Despite that, it’s always a matter to reconsider what is the “best” choice for your specific needs. Here we initiate a very understandable guide that will try to fulfill your buying requirements. The guide generated here not only gives a handful of information but also focuses on your specifications. Mostly what we try to keep on the first line is that the guide meets up your queries. So it’s a better approach to go through the guide a little consciously, so it can be at your full help.

### **Is it a must thingy?**

### Gadgets always have a cool impact on a certain field of work and this is no less than that. Being a gadget lover the solar car battery charger’s coolness is out of boundaries.  Even if you’re not too familiar with the Gadget world, it’s still a smart choice for you to keep this in your cart.

This charger has a working principle that more or less works as a boost up mechanism. In a situation where your battery is about to shut down, this can save your back. So, having a solar car battery charger is a helping hand to your emergency situations.

The batteries follow three types of technology- Amorphous, Monocrystalline, Polycrystalline, which increases the conversion process.

Supplying discontinuous voltage supply, the batteries simply rev up their durability. Most of them work in any weather condition. These can also be used in case of other types of vehicles. Here are some features to be noticed:

**Trickle!**

This trickle charging system is quite efficient to keep your battery charged even if the manual power source is turned off.

It helps the depletion of the charge to be less and keeps the battery moderately charged for a long period of time. This means if the charge is required, it charges the battery up to the need. So the battery doesn’t get overcharged. Rather it has a rechargeable working principle.

### **Controlling Charge**

The consumption of batteries has a limit that should be monitored evenly for keeping the battery life long. This charge control helps to limit the power that is drawn to the batteries so that it is not overpowered. If the battery always gets charged too much it can cause an explosive situation.

The proceeding charge controlling mechanism lessens the risk of having a disabled battery. To pump up a dead battery, these chargers aren’t that much of a helpful. But for moderate charging, most of these keeps the optimum voltage of 12V.

### **Level of Power**

This remarkable device can generate up to a very optimum level of power about 12V, starting from at least 2V (some also provide a higher voltage of about 18V) that is a kick start to the batteries. Power is calculated in Watts here, and in the market, there is a handsome number of chargers that can generate power up to a high rate.

For example, the Schumacher battery maintainer can come with 5 different levels of power- 10W, 2.4W, 4.8W, 5.5W, 6W. Others have more variation in this level of power, which simply is used up to needs.

### **Easy Operation**

Some additional apparatus is added with most of the chargers available on board. These include- Alligator clips, Solar panel, Charge controller, Car cigarette lighter charger. The crocodile clip or alligator clip can be easily connected to the battery for charging purposes. Cigarette chargers also give a handy to charge up the batteries. All it needs is to be plugged in with the battery. The installation process is less painful, which makes it a user-friendly one.

### **Portability**

One of the most significant features is it’s portable. When it is impossible to provide charges to your car’s battery it gives you a smooth escape from unnecessary headaches.

The panel can be easily attached to near the window, or the car’s dashboard, so it can absorb enough sunlight to initialize the operations.

### **Technology and the panels**

The Amorphous technology is the most efficient one to convert energy up to 22.5%. There’s this polycrystalline tech which is a little bit less effective. Then comes the monocrystalline one. However, these technologies also measure how flexible the panels are when mounted.

The panels come with variances of dimensions, which is also an easier measure to choose the necessary one for you. Most of the panels are created with protective glasses or some PVA sheets, for which they can bear a certain amount of loads. For mounting the panels, in most of the cases, suction cups are provided.

## **Selected Products**

### Schumacher SP-200 2.4W 12V Solar Battery Maintainer

#### *Sharp Traits*

Solar battery charger’s main function is to provide discontinuous voltage supply, which this specification can make possible easily.

The Schumacher maintainer has a dimension of 19.2 inches in length, 10.2 in width, depth of 1.4 inches and weighs 2.4Ibs. This can work even in cloudy conditions and is well water-resistant, which makes it a strong competitor.

The specification comes with 5 different powered segments up to usage needs. So the buyers get a flexible choosing option of 10W, 2.4W, 4.8W, 5.5W, and 6W powers.

Extending battery life this product simply increases its demand in the market-place. Not only car battery can be beneficial but also it is a fine choice for boats, motorcycles, snowmobiles, trucks, RVs and many more. It maintains an optimum voltage of 12V, which is very handy in charging the batteries.

It represents the amorphous solar technology that increases its performance and makes it more space-efficient. As a consequence less amount of silicon is inserted than that of a crystalline- solar-based solar cell.

Its flexibility to set despite any abrupt surface makes it more of a qualitative product.  It is highly rated for both indoor and outdoor usage, provides clamp adaptor and mounting screws for better set up.

The Schumacher Solar battery maintainer has a 12-month warranty of work capacity.

#### *Downfalls*

Having a handful of effective features it still might make one uncomfortable to rely on it fully. It’s a “Maintainer”, to your car problem, cannot allow you to have full remedy to your problems. In other words, it’s not a full-functioned charger. Also, this has no indicator that will help you understand if it’s working.

<https://www.amazon.com/Schumacher-SP-200-Solar-Battery-Maintainer/dp/B004ZC3TFC/>

### Sunway Solar Car Battery Trickle Charger & Maintainer 12V Solar Panel Power Kit Portable Backup for Car

#### *Sharp Traits*

This remarkable specification comes with two different categories having both, crystalline silicon (3W) made up the charger and an amorphous (1.5W) solar techno-based maintainer. It also has a little more powered (5W) than these two types. Smartly designed to drain charges from small vehicle parts.

The battery capacity has to be at least of 20Ah for having an unharmed battery. Else the battery will be overcharged and can cause serious situations. It also ensures reverse discharge protection.

It provides suction cups so the panel can be easily mounted to the windows or dash of the car. Covered with ultra-clear PV glass this ensures more efficient working experience. It also contains durable ABS plastic housing and this feature makes it stronger. The strong the panels are the more efficiently the work is done. As a result that gives us low maintenance costs and quality work.

It also includes 16 feet extended cable connectors with the terminal ring adaptors, cigarette lighter adaptor and alligator terminal clamps. This has an LED blue flashing indicator that shows if the device is working or not. Having a unique design of a dimension of about 13.9-inch x 5-inch x 0.5 inches, it has a long rectangular panel that is easier for mounting.

It’s a highly waterproof device, gives accessibility in all weather conditions, which is quite handy. Easily connects and disconnects with the battery so its easy operative. Light-weighted and ensures a compact design. Maintains energy saving principle.

#### *Downfalls*

Despite having this many facilities, this specification does have some bounding. It has less overcharge protection. Though it has suction cups for mounting successfully, still the flexibility remains questioned.

<https://www.amazon.com/Sunway-Solar-Maintainer-Automotive-Powersports/dp/B01MYVUSRH/>

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### SUNER POWER 12V Solar Car Battery Charger & Maintainer

#### *Sharp Traits*

This SUNER power 12V battery charger has both work affordability as a charger and also as a maintainer. Comes with three powered state- 3.4 watt, 6 watts, 8 watts. This can operate where the panel of its can get enough presence of sunlight.

Other than the car, this can supply other vehicles like motor-bike, boats, tractors, marine, RVs, trucks, etc. This gives a certain assurance that the battery will not be overcharged and so your battery is in safe hands. This also ensures to block reverse discharge having a built-in blocking diode. So it basically doesn’t harm your device from transferring output power to input power.

The visualized dimension is about 12-inch x 8-inch x 0.7 inch, which means this has a medium level of size. It contains four low wattage charging variances of 2.4W, 4.8W, 6W, 8W.

It is covered with premium strong solar glasses that easily make it heavy-duty enough to stand high loads. There are these rubber lining edges in the panel. Summing up, it is well built for a longer time to function. This has an easy installation process, no additional complicated kits, provides alligator clips, cords, and mounting cups. The suction cups work efficiently. Gives lifetime technical support along with a 1-year warranty, which is a plus point for the consumers.

#### *Downfalls*

If we calculate the drawbacks we see that, this has lacked flexibility. This has a portability facility but cannot be placed in every surface area, which limits its flexibility. Uses monocrystalline technology which is less efficient than that of polycrystalline ones. This is also quite a heavy device of about 3 pounds because of the rubber edges of the panels.

<https://www.amazon.com/SUNER-POWER-Battery-Charger-Maintainer/dp/B07DFCDKLJ/>

### POWOXI Solar Battery Charger Car, 7.5W 12V Solar Trickle Charger for Car Battery

#### *Sharp Traits*

With a solid structure of the solar panel, this charger has three different types each having different power levels of 3.3W, 7.5W, 9W.

It provides a trickle charging application that constantly charges up the battery up to need. It has a built-in blocking diode structure that limits reverse discharging. In the presence of strong light energy, the LED indicators function finely. So it’s easier to get notified.

Amorphous solar cell is used in these specifications that help to convert at best 20% energy and also can store the converted energy. The alligator clip can easily be connected to the battery for charging purposes. The installation process is quite convenient.

It has water, snow and wind resistivity, which enables it to be a versatile choice. It can work in all weather situations. It has guaranteed certification from CE/ROHS that safeguards its 12-month warranty.

It has an optimum size (14.5-inch x 9-inch x 1.7 inches), for which it is easy to carry and can be placed anywhere up to will. Delivers suction cups for better adjustments. The advanced option this specification also includes amorphous solar technology that certain it to be one of the great choices.

#### *Downfall*

The delivered suction cups are problematic for mounting in most cases. The alligator clips have a looser grip on the battery terminals, so it is quite disappointing. Heavy weighted for having rubber bumpers. It doesn’t consist of a solar charge controller.

<https://www.amazon.com/POWOXI-Waterproof-Maintainer-Conversion-Polysilicon/dp/B07JLWFPX6/>

### SUAOKI 18V 12V 18W Solar Car Battery Charger

#### *Sharp Traits*

This design has a high energy conversion capability that converts luminous energy to electric power up to 22.5% and has an output voltage of about 18V and 18W of energy that works better than that of 4.5W, 7W, and similar chargers. The SUAOKI solar car battery charger shows its superiority having a light-weighted configuration of only about 345g.

It’s a smart choice for maintaining batteries of automobiles. Prevents discharging the battery when there is less light. Water, heat resistant and has quick heat dispelling working efficiency. It is highly-designed for long term use. The battery can also be charged directly via the cigarette lighter plug. So there’s always an alternative program to keep the battery filled up. Keeps the batteries life safe for a chronic period of time.

The display of the panel is about 16.5 inches in width, 11 cm in length, 0.5 inches of thickness and it can be slightly bent as per need. 1.5 m power is included and for having a large display this can invite more sunlight. Along with the alligator clip and cigarette port, they provide 4 suction cups for better mounting and as an alteration of suction cups, there are 4 eyelets where the panel can be screwed up easily. So its flexibility shows it is worthy of a choice. This has a comparatively promising warranty rate of almost about 18 months!

#### *Downfalls*

Despite being light-weighted it has a visual difference-making surface area, which might not be the choice of a lot. This can’t regain a dead battery to function though it has a high rate of conversion of energy.

<https://www.amazon.com/SUAOKI-Portable-Cigarette-Motorcycle-Snowmobile/dp/B0722XB3VQ/>

### MOOLSUN 12 Volt 12v Solar Battery Charger, 10W Solar Car Battery Charger

#### *Sharp Traits*

#### The MOOLSUN charger has a really cool visually attractive configuration that will easily invite consumers towards this. Having a conversion efficiency of about 19%, this has easy portability facilities. Light-weighted and has high portability efficiency. The operating voltage is 18V but can work for batteries having 12V.

Has a perfect combination of kits having 2 suction cups to set the panel effortlessly, 1 crocodile clip to connect the battery, 1 cigarette lighter plug for alternative way of charging the battery. Quite efficiently this blocks to discharge the battery. It has a plastic fabric body.

Effortlessly saves a good amount of energy, has a waterproof and scratch-proof working surface. This has a different kind of terminal points of the plugs named as O ring terminals. The panel is covered with animal laminate and PVC material, for which it has a differentiable visual representation. Mono solar cell tech is imposed here. Having a moderate warranty of about 18 months simply gains the praise of the consumers.

#### *Downfalls*

Having so many cool specs this still has a noticeable demerit that is, it is not fully waterproof. It can endure some drops of water, but in worse weather conditions its function might get deteriorated.

<https://www.amazon.com/MOOLSUN-Battery-Maintainer-Automotive-Motorcycle/dp/B07Q9LPTR9/>

### POWISER 3.5W Solar Battery Charger 12V Solar Powered Battery maintainer

#### *Sharp Traits*

This gadget is made of polycrystalline silicon cells which ensure to draw a high amount of charges so it can moderately charge up the battery. This operates as both a trickle charger and a maintainer. It comes with two variations, 7.5W poly, and 3.5W poly.

This has a suitable panel that can maintain a high impact force, has a strong tempered glass surface which is easy to clean. It can withstand hail, heavy rain and still can function with high efficiency. Its installation process is quite user-friendly. So one can easily get the idea of working along with it.

Provides lifetime technical support which is a relieving fact for most beginner users. For achieving maximum power in the same area, it is a great of a choice. It has a small-sized visibility and easily affordable and portable in outdoor usage.

The POWISER Solar battery charger provides a lifetime technical support with a 365days of warranty.

#### *Downfalls*

Sometimes create problems draining battery charges rather than charging it. There’s no mounting accessories, so it is a little difficult to set the whole panel.

<https://www.amazon.com/POWISER-maintainer-Automotive-Motorcycle-Powersports/dp/B07QJ8KZS9/>

## Why should we turn to solar battery chargers?

It is not a highly modified gadget that can revive a dead battery from its off functioned state. Renewable energy always works with efficiency and the vital part is that it works without harming the surroundings. We experience the same case here.

This charging mechanism is user-friendly, eco-friendly, doesn’t harm the batteries. Moreover, it increases the longevity of battery life. In case of a situation of emergency, these solar battery chargers are your life savior.

It is not a must to have a solar charger, but if we can lessen the consumption of other non-renewable energy and little more conscious about the total fact, it won’t cause us any harm, rather it will be game-changing matter.

However, we see other charging gadgets (which of course do not follow the usage of green energy), might have high work efficiency and experience. But it has limitations like- the batteries losses its durability, overpowered charges can cause explosive occurrences. So in such cases what we can do is shift our vision to these sustainable sources of energy. Kick-starting the battery with a strong power source we can hereafter switch to solar battery chargers, which will even keep the battery charged up to needs.

So we can undoubtedly say solar systemic chargers have rigid effectiveness over other forms of chargers.

## FAQs

### Can these chargers be well fitted in windshield?

Most of the chargers provide suction cups for the better mounting facility. Other than that these chargers are easily fitted in all dashboards.

### Are the panels rigid or flexible?

Most of them are flexible as they use amorphous technology. Some might show a little rigid behavior. But there are these suction cups to increase its flexibility.

### Is it possible to use two panels parallel?

Yes, moreover it will increase efficiency.

## **Conclusion:**

The measurement of the best solar car battery chargers depends on your working purpose and choices make the variation in case of consuming those. Each one of these is manufactured, keeping the fact in mind that your needs are fully filled. So the quality is of like your mind.

Basically at first while choosing a charger we calculate its efficiency, its portability facility. We also focus on if it has extensive features that minimize our hardships. This is also to be noted if it is well-engineered. Most importantly we look for a protective one as a choice because we want work efficiency without any kind of disruption.

So we have summarized the topmost choices up to your need which will not make you disappointed.

## **Meta Description:**

Want to experience a friendly expedition with the best solar car battery chargers? We present to you the high rated choices with a proper guide. Hop along!