

# USER MANUAL

TP-solar **SOLAR TRICKLE CHARGER – BATTERY MAINTAINER**



TP-Solar Technik GmbH, 41468 Neuss, DE

## Retain these instructions

**CAUTION:** Please carefully read these instructions prior to using this product. Failure to follow the precautions and warnings contained in these instructions may lead to product damage.

## Important Safety Information

Thank you for choosing our product! This product is designed for use under conditions. If you are unsure of whether or not the product can be used in a certain way, please contact us. We strongly discourage the alteration or modification of this product. If you need to alter or modify the product, please contact us for further information. We will not assume responsibility for any consequences that result from modification of the products.

**This product is a portable solar-powered charger that is light and easy to carry. It utilizes high-efficiency solar panels, and ultra-translucent PET materials are used for the outer layer of the panel**

## Feature

- 1- Keep your battery topped off in all season with free solar energy
- 2- A built-in circuit board prevents overcharging and reverse charging, so there's no drain on your battery
- 3- Heavy duty 2.1mm x 5.5mm DC plug with extension cord allows plug play
- 4- Waterproof & anti-ultraviolet fabric for long lifetime
- 5- Low maintenance, portable and light weight
- 6- 4 suction cups enable easy mounting
- 7- Interchangeable clamps & cigarette lighter cables & O-ring terminal allow further application

## Application

This product can be used in a variety of everyday scenarios to alleviate a host of the trouble. For example, if you worried that your cars' batteries would drain while you are away on a trip, or if you want to install a small outdoor fountain without connecting it to your home's electrical system, our product offers a quick and convenient solution.

In addition, this product can be used in truck, yachts, boats, or with small water pumps, LED lights, small batteries, micro DC fans, surveillance equipment, and all sorts of other devices.

If you would like to use this product for another scenario but not sure whether it will work for you, please contact us.

## Technology Parameters

Maximum Power (Pmax)	20 Watt
Maximum Working Voltage (Vpm)	14.5 Volt
Maximum Working Current (Ipm)	1.3 A
Weight	1.1 LB
size	14.1*13.1 inch

## Package list

NO	Item	Cable length	Qty
1	20W solar panel	3 inch	1
	DC plug extension cable	78.74 inch	1
2	Crocodile clip	7.8 inch	1
3	Cigarette lighter plug	7.8 inch	1
4	O-ring terminal	7.8 inch	1
5	Suction		4
6	carabiner		2

## Wiring the Solar Panel

This product can be connected using two methods

### 1- Cigarette lighter connection method

Connect the cigarette's female DC plug to the extension cable's male plug and to solar panel's female plug, insert the cigarette lighter connector into the vehicle's cigarette lighter to charge the vehicle.(this works with the majority of the vehicles).

### 2- Crocodile clip/O-ring terminal connection method

Connect the crocodile clip/O-ring terminal's female DC plug cable to the extension cable's male DC plug and to the solar panel's female plug, and clamp the crocodile clips/O-ring terminal onto the positive and negative poles of the car battery or another battery. (The red crocodile clip is positive and the black crocodile clip is negative)