Safety Tips

Before using the product, be sure to read the instruction manual and the safety tips.
If the product is damaged or in any other unusual condition, do not use it.
Do not allow water to enter the the bag, panels or any cables/parts that come with the product.
Prevent sharp objects from scratching the module surface and/or damaging the bag and cables.
Please ensure proper cable connections to charge controller and battery to prevent short circuits.
Do not use any other cables than the ones supplied with the product or officially sold accessories for this product.
This product does not contain any user-serviceable parts. Do not disassemble or attempt to repair it.
Do not touch exposed electrical contacts and/or connect/disconnect any wiring under load (e.g. while charging).

Frequently Asked Questions (FAQ)

What kind of battery can be charged using this module?

- The voltage of the panel is suitable to employ the product for charging 12 V systems using a dedicated solar charge controller. The charge controller determines what battery types can be charged.

What type of solar charge controller should be used?

- We highly recommend a MPPT type controller that complies with the 2 basic requirements: a) Solar panel input voltage at least 25 V, b) output charge current at least 10 A continuously.

How to clean the module surface?

- Dust and dirt will degrade the performance of the product. The panel surface can be cleaned with a soft brush or a damp cloth. Any scratching and the use of cleaning agents should be avoided. Do not let water enter the product.

Are these foldable solar modules waterproof?

- No. Because the system contains sophisticated electronic components, moisture entering the product may lead to damages and the risk of electric shock. If the product is not 100 % dry, do not use it.

tiger2solar

foldable solar module 120 W_p

TEX2000 „tiny tiger 120“

Performance parameters

max. power (P_{max})	120 W
open circuit voltage (V_{oc})	24.6 V
short circuit current (I_{sc})	6.32 A
MPP voltage (V_{mpp})	20.9 V
MPP current (I_{mpp})	5.97 A
max. system voltage	100 V
size folded	560×440×20 mm
size opened	1525×560×4 mm
cell technology	Sunpower Mono 3.44 W
cell efficiency	22.14 %

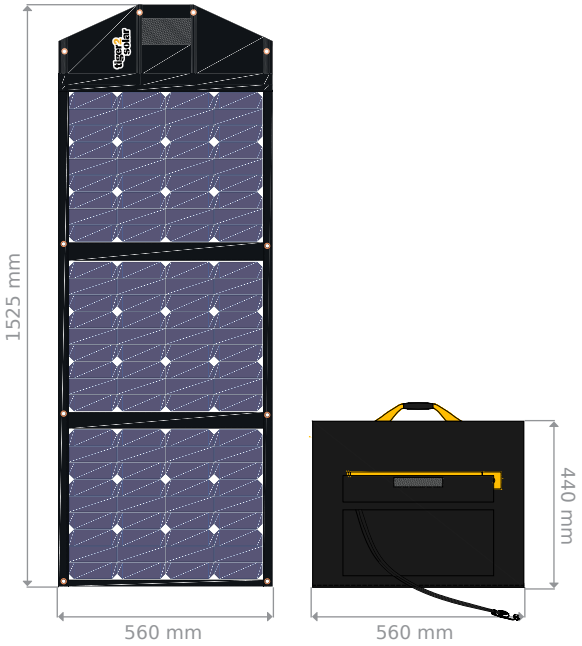
Technical data at STC (standard test conditions) with 25°C ambient temperature, 1000 W/m² solar irradiance and an AM factor of 1.5.

Made in China

texdev GmbH
Weseler Straße 82
46519 Alpen · Germany

CE

Scope of delivery



1. 1× extension cable (5 meter)

2. 2× charge controller cables

3. 1× cigarette lighter plug cable

4. 1× cable with battery clips

Connecting a solar charge controller

This product should be used with a suitable (see FAQ) charge controller only. Please consult the manual of your specific charge controller on how to set it up.

The panel comes with 2 short cables with one end left open and a SAE connector on the other hand. The cables are black and red color coded, red stands for positive side ⊕ and black for the negative side ⊖ of battery and solar panel. Please attach these two cables to the appropriate inputs on the solar charge controller BEFORE connecting anything else to the SAE connectors.

For the battery side you can now attach one of the supplied cables (battery clips or 12 V standard cigarette lighter plug) or an appropriate accessory (e.g. battery cable with ring connectors). Please make sure these cables have a proper 15 A ATO fuse inserted before using them.

The solar panel should still be covered and/or folded before connecting it to the charge controller. Depending on manufacturer and model, you need to connect battery first, only then the solar panel – or the other way around. Please consult the charge controller‘s manual!

Using the product

Find a free open space that is not obstructed with trees or bushes and permits clear cable routing towards your vehicle battery. You can insert the additional 5 meter extension cord between solar panel and charge controller – the controller should usually be closer to the battery than to the panel.

Open the panel and set it up as purpendicular to the incoming sunlight as possible, using the attached feet on the bag or by simply laying it onto the ground, a car or alike.

Your charge controller should be working normally now.
Please be advised, that the power delivered by the panel depends on several factors:

a) Amount and angle of sunlight reaching the panel:

The more, the better. The more purpendicular to the panel surface, the less reflections of precious sunlight occurs. You might need to re-adjust as the sun moves – or the earth for that matter.

b) The temperature:

A solar panel in winter with good sunlight can potentially yield more energy than the same panel during a very hot summer. Your MPPT charge controller will make the best of it and we have choosen some of the best cells on the market to keep temperature influx minimal – but, it will always be there.

c) Your battery and consumption:

Many people complain about lack of solar energy output, because they measure low power outputs from their solar panels. Very often the reason is quite simple: The battery is already full and/or the energy used is less than the theoretical power that could be produced. That said, a solar panel cannot just „spit out“ power, the energy needs to be used. If a full battery doesn‘t take more energy or your mobile phone is already charged and the freezer‘s compressor is currently not running, the power output of the solar panel will be close to zero, even though you have perfect sun. If you want to test the maximum energy output for a given time and day, you need to make sure, that you actually use that much (or more, if your battery can handle it) energy.