



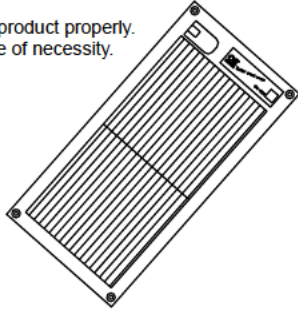
Solar sheet charger

User Manual

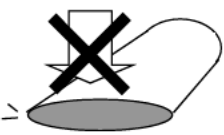
To customers

Thank you for purchasing our product.
Please read this manual carefully and use the product properly.
Also, please keep this manual with care in case of necessity.

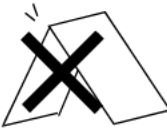
GN-050 (Solar sheet charger 5W type)



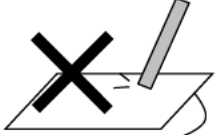
CAUTION The material of solar sheet is soft, however, to make it long-lasting, Please pay attention to the following points.



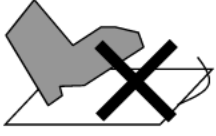
Do not crush the rolled sheet!



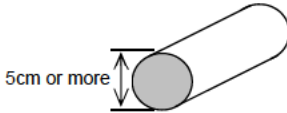
Do not fold the sheet!



Do not damage the sheet!



Do not stamp the sheet and put heavy stuff on the sheet.



When rolling the sheet, do not roll it to 5 cm or less in diameter

GN050_19124E

-1-

Manufacturer

OSM CO.,LTD.

Importer

OSI CO.,LTD.

20th Floor, Wah Hing Commercial Building,
283 Lockhart Road, Wanchai,
Hong Kong
PHONE: +852-3580-0087
FAX: +852-2367-4300
e-mail: info-hk@os-worldwide.com

-2-


Safety Precaution
Please be sure to observe for your safety


In this manual, to prevent people and other people from harm and damage to property beforehand, what to do is explained by classifying following icons.

WARNING The column with this icon indicates contents that may possibly result in death or serious injury.










CAUTION The column with this icon indicates contents that may possibly result in possibility of injury or physical damage.

■The contents are classified and explained by the following icons.

 This icon shows the contents of "prohibited" which should not be done.





 This icon shows "compulsion" that you always need to perform.

WARNING

-  **Do not use near heat source or fire.**
It may cause fire accident and breakdown.
-  **Do not soak solar sheet in water or use when it is wet.**
It may cause overheating, ignition, battery leakage, electric shock, explosion, and injury.
-  **Do not disassemble or remodel the USB box.**
It may cause heat generation, ignition or malfunction due to short circuit.
-  **Do not fold solar sheet and roll it less than 5cm in diameter.**
It may cause heat generation, ignition and malfunctions.
-  **Do not insert metal object etc. into USB connector.**
It may cause electric shock or fire due to short circuit.
-  **Do not misunderstand the direction of connector or insert into device on purpose.**
It may cause unexpected injury or malfunction.
-  **Do not use solar sheet for improper purpose.**
It may cause unexpected injury and malfunction.
-  **In case of abnormality such as smoke or smell, immediately disconnect the cable and stop using it.**
It may cause fire due to short circuit or malfunction.
-  **Before charging, carefully read the user manual of the device to be charged and fully confirm that there is no problem with the specification of this product.**
If it exceeds the charge voltage or rated current of the charged device, it may cause a malfunction.

-3-

CAUTION

-  **Do not use in high temperature areas such as on summer asphalt or in a car in the strong sun.**
Please use in an environment where the temperature of the product ranges from 0 to + 60 ° C. Especially, please cover the box with cloth etc. when necessary to prevent the USB box and the charging equipment from getting hot.
-  **Do not store in high temperature and high humidity place or in dusty places.**
It may cause the failure.
-  **Charge with this product while the remaining battery level of the charging target device remains.**
It cannot be charged with this product for equipment that consumed batteries so that the initial display does not start up even when the power is turned on. In such a case please charge with a genuine charger.
-  **When used by children, use safely under the guardian's attention.**
It may cause unexpected injury or malfunction.

■We will not be responsible for accidents, damage in case of not observing the precautions.
■We are not responsible for accidents or damage due to incompleteness in handling or natural calamity.

-4-

Feature of this product

This product is a solar sheet charger which can charge smartphones and mobile batteries etc., using sun light. By connecting a USB charging cable compatible with the charging device, such as a smartphone, it is possible to charge at the same time while generating power with the sunlight.

■ Chargeable devices

- Smartphones and mobile batteries etc. which can be charged by using USB(DC5V).
- Even if the above conditions are satisfied, depending on the model, smartphones and mobile batteries may not be charged.

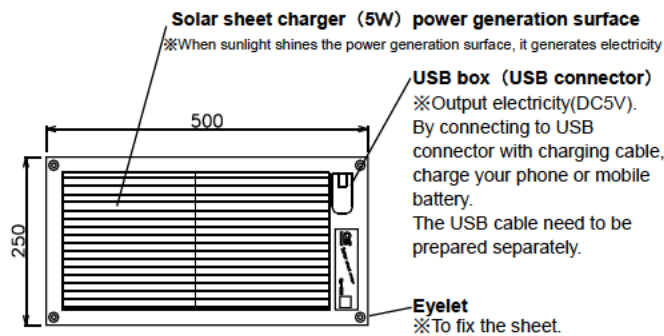
What in the package

The items below are in the package. Please check if everything is inside of the box before using.

1. Solar sheet charger「GN-050」 x 1
2. Storage bag x 1
3. User manual (this document) x 1

Name of each part

● Solar sheet charger



Charging Time (As a guide)

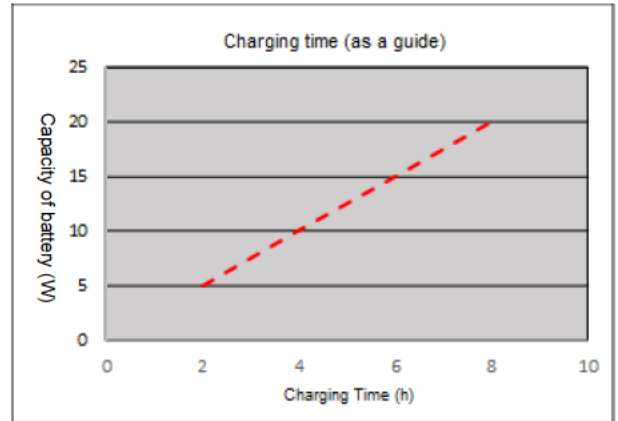
This product enables smartphone of 2600mAh(3.7V) battery capacity to be charged fully for approximately 4 hours when it is sunny day.

By battery capacity of your mobile devices, approximate charging time can be calculated, however, the time will be as a guide considering the device feature and charging loss.

When the battery capacity of smartphone is 2600mAh(3.7V), $2600\text{mAh} \times 3.7\text{V} \approx 9.6\text{Wh}$ / 4 hours Charging time

e.g. : When the battery capacity of your smartphone is 5000mAh(3.7V), $5000\text{mAh} \times 3.7\text{V} \approx 18.5\text{Wh}$

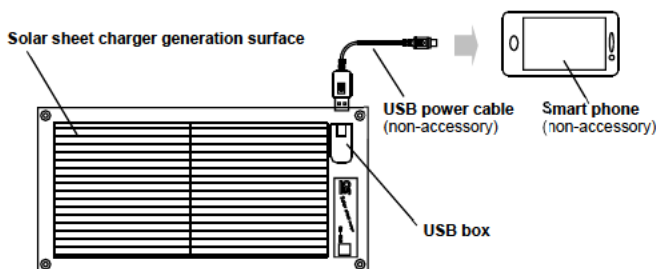
$$18.5\text{Wh} \div 9.6\text{Wh} \times 4\text{hours} \approx 7.7\text{hours}$$



How to use

1. Charge your smartphone

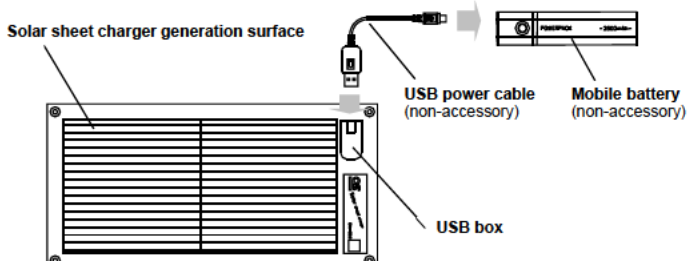
- ① Spread the solar sheet charger the way generating surface the sun shines in.
- ② Open the cap of USB box and connect USB power cable for the smartphone to USB connector.
- ③ When the USB cable is connected to your smartphone, charging starts.



CAUTION On some smartphones, a warning may be displayed when there is insufficient sunlight. In this case, unplug the cable and try it again where the sunshine is enough.

2. Charge your mobile battery

- ① Spread the solar sheet charger the way generating surface the sun shines in.
- ② Open the cap of USB box and connect USB power cable for the mobile battery to USB connector.
- ③ When the USB cable is connected to your battery, charging starts



Product specification

Maximum power generation capacity	: 5.4W	※1)
Maximum output power	: 4.75W	※2)
Maximum output voltage	: 5.0V	※2)
Maximum output current	: 0.95A	※2)
Dimension	: L500×W250 t=1mm (except protrusion)	
Weight	: Approx. 0.14kg	
Product temperature in use	: 0~+60°C	※3)
Operating humidity	: Less than 85%RH (No condensation)	※4)
Temperature for storage	: -20~+60°C	※4)
Waterproof	: IP65 (except USB box)	※5)
Accessory	: Storage bag x1	

- ※1) The maximum power generation capacity indicates the value of solar sheet only without through the circuit in the USB box.
- ※2) The value might be different as the generation capacity depends on sunlight condition.
- ※3) When use this product out of the usage condition, it may cause degradation of circuit in the USB box and the output value may be less than the one in this specification.
- ※4) In an environment exceeding the operating humidity and storage conditions, the main body deteriorates remarkably, and it may lead to breakdown.
- ※5) The USB box is not waterproof. Especially, make sure not pour water on USB connector. In case water comes into the box, dry it out well before using.

Note

- This product does not have USB power cable as an accessory. Please prepare it separately which is suitable to your device.
- On some smartphones, warning such as "This accessory may not be used" when there is insufficient sunlight even when charging is in process and charging stops. In such case, unplug USB power cable and connect the cable again where sunshine is strong enough.
- Power generation capacity may be lowered when the sheet is over UV cut glass.