



TITAN POWER 14-50

User guide and maintenance



CE RoHS

Please read this guide before you use your device!

INTRODUCTION

Congratulations for purchasing your TITAN POWER 14-50! Exposing it to the sunlight, you can feel free to power up your device. This product is designed for the highest technical specifications and standards. It will supply years of maintenance-free use. Please read these instructions thoroughly before use, then keep them in a safe place for future reference.

This instruction manual is a guide for using the product correctly. We kindly ask you to read it carefully before using the system to ensure that it operates correctly for as long as possible.

Becoming familiar with the structure and functions of the product is fundamental, in order to use it accurately and efficiently, to satisfy every need.

NOTES:

1. To ensure a safe and prolonged use of the product, it is essential that it is used properly and that regular routine checks are carried out.

Before proceeding with any operation or maintenance, please read this manual carefully. If the system shows any defect, please contact the ASTECHNOLOGY SPA agent or dealer.

2. If the product is resold or transferred to third parties please make sure that the manual is delivered with it. If the manual is not available, please ask for a copy.

3. In this manual, operations or conditions that could cause a fatal accident or fire are marked with "DANGER", while those that could cause the system to break or malfunction are marked with "CAUTION".

4. The company cannot be held liable for injuries or damage caused by user negligence or failure to follow the instructions in this manual, especially those marked with "DANGER" or "WARNING". Such damages are not covered in any way by the guarantee.

5. Please note that as a result of our continuous efforts to improve our products, some specifications of the equipment you have purchased may differ slightly from those given in this manual.

1. TECHNICAL SPECIFICATIONS

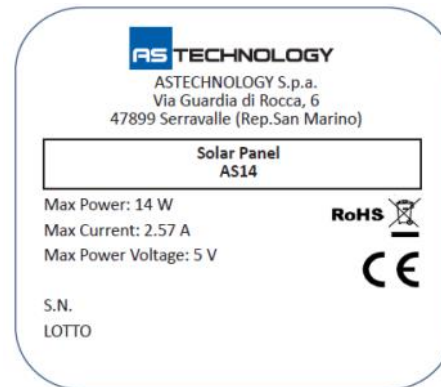
The batteries are powered at 5V DC. The technical specifications can be seen on the product and/or on its packaging.

The product should be used in an environment with the following environmental specifications:

Ambient temperature: -10 to +45 °C

Power Bank TITAN 10		Solar Panel AS14	
Size (mm)	120x75x20	Monocrystalline solar panel	14 watts
Weight (kg)	0,350	Size Opened (mm)	660x260mm
Input		Size Closed (mm)	260x190x38mm
Micro USB	5 Vdc - 1000 mA Max	Weight (kg)	850 g
Output		Output Ports	
USB output	5 Vdc - 1000 mA Max	USB	5V / 2.5 A
USB output	5 Vdc - 2100 mA Max	Operating Temperatures:	
Internal components		Optimal Operating	-20°C-50°C
Battery	Li-Ion	Optimal Storage	-20°C-40°C
Battery capacity	50 Wh - 13000 mAh		
Lifetime (n° of cycles)	Approx. 800-1000		
Safety class	III		
Recharging time	~10 h		

2. LABEL



3. DISPOSAL INSTRUCTIONS

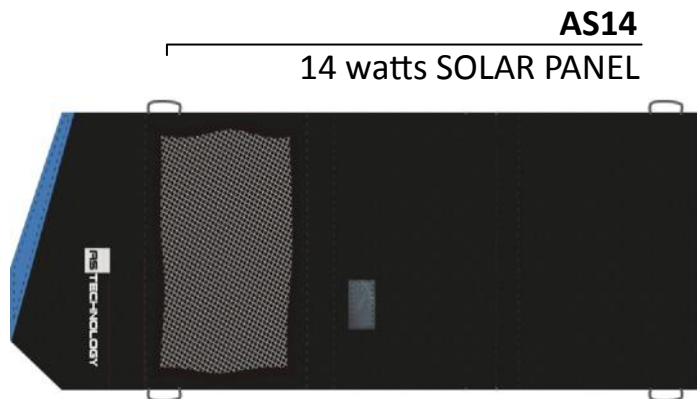


According to the European WEEE directive, electrical and electronic equipment must not be disposed with consumers waste. The components of TITAN POWER 14-50 must be recycled or disposed apart from each other. Otherwise contaminative and hazardous substances can pollute our environment (EU Directive 2012/19/EU).

4. PACKAGE CONTENTS AND COMPONENT NAMES

Included in box

- 1) N° 1 high efficiency 14W Solar Panel, model AS14
- 2) N° 1 50Wh Power Bank, model TITAN 50
- 3) N° 1 USB/microUSB cable
- 4) User guide



5. SYMBOLS USED

The following symbols are used in this manual and on the product labelling and packaging to draw the user's attention to particularly important information and observations.



Caution – High voltage



CAUTION or DANGER



European CE conformity marking



Conformity with the Directive 2012/19/EU


















Conformity with the Directive 2011/65/EU

6. PRECAUTIONS BEFORE USE






6.1) INTENDED USE

The product is intended for powering devices with an operating voltage of 5V DC (smartphones, tablets, MP3 players...)

6.2) GENERAL "DANGERS" & "CAUTIONS" (TITAN 50)

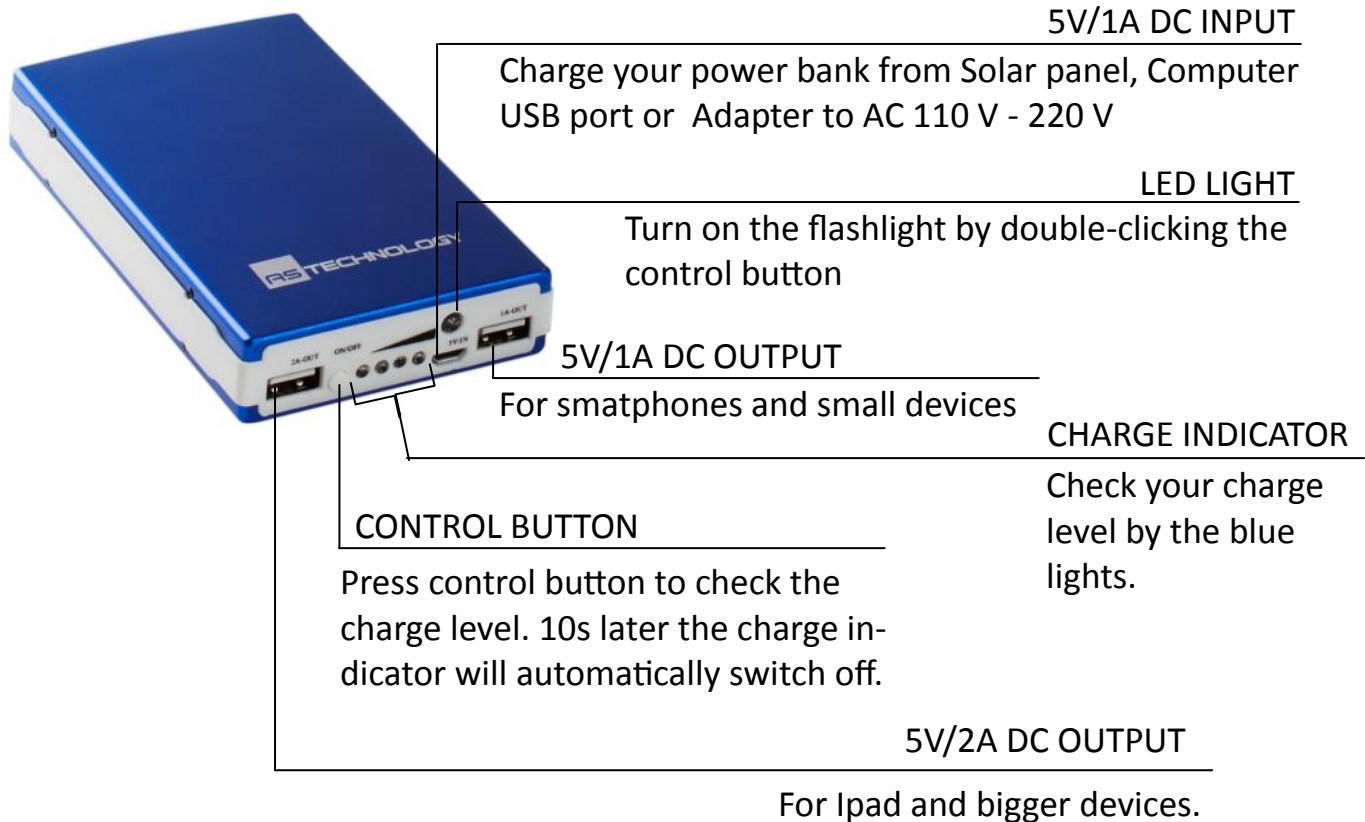
-  "DANGER" – The equipment must not be exposed to sources of heat or fire. Do not expose the product to direct sunlight.
-  "CAUTION" – Connect the equipment to a low voltage 5V DC power supply.
-  "DANGER" – Connecting the system to the 230 V, 110 V or 400 V mains, or to networks with higher voltages could cause serious personal injury or substantial material damage. Any work on or near the equipment must be performed only by qualified personnel.
-  "CAUTION"- We recommend periodically checking the condition and operation of the equipment's parts.
-  "CAUTION"- Always use the charging device approved by the manufacturer.
-  "CAUTION"- Do not use for any purpose other than that mentioned in this operation manual. Improper use could cause damage and injuries.
-  "CAUTION"- Do not dismantle or open the product. If the device is not working, do not try to repair it.
-  "CAUTION"- Do not insert inappropriate objects into slots on the product.
-  "CAUTION"- Do not cover the product during use/non-use of the battery.
-  "CAUTION"- This product contains lithium-ion batteries. Violent shocks could cause fire or explosions
-  "CAUTION"- When charging the battery for the first time or after a long period of non-use, it could take 12 – 14 hours to fully recharge the battery
-  "CAUTION"- The battery may produce heat during use and while recharging. This is normal and does not indicate a malfunction.
-  "CAUTION"- If the product is not used for a long time, it should be fully recharged at least every three months to maintain its performance.
-  "CAUTION"- If the equipment is not used for a long time after the battery has been charged, the charge level will drop due to normal self-discharging. Recharge it again before use.
-  "CAUTION"- Keep the product clean. In the event of dust getting in the IN and OUT ports, remove it with a dry cloth before use.

6.3) "GENERAL "DANGERS" & "CAUTIONS" (AS14)

-  "CAUTION" - The solar panel should face the sun when it is in use.
-  "CAUTION" - Keep the surface of the solar panel clean.
-  "CAUTION" - Connect it just with the same product type, avoid scratch and drop
-  "DANGER" - Protect it from getting wet, High temperatures and fire.
-  "DANGER" - Please stop using solar panel if it is damaged, wet, deformed or broken.

7. TITAN 50 DESCRIPTION AND MODE OF OPERATION

7.1– TITAN 50 Functions Overview



Always check that the input current specs of the USB device is compatible with those of the device to charge.

7.2- TITAN 50 Charge status

Pushing the on/off button, the LED charging status indicators turn on. After 10 seconds they turn off automatically.

- 4 LED on: 100% charged
- 3 LED on: 75% charged
- 2 LED on: 50% charged
- 1 LED on: 25% charged

FLASHLIGHT FUNCTION

Quickly press and release the on/off button twice: the LED flashlight is on.

To switch it off, quickly press and release the on/off button twice.

7.3– How to charge the TITAN 50 power bank

Plug the USB cable in the USB output port of the Solar Panel AS14 (Fig. 1), computer USB (Fig. 2) or Adapter to AC 110 V - 220 V (Fig. 3) and connect it to the Micro USB input port of the TITAN 50 Power bank. The charge will automatically start. During the charge, charge indicators blue LEDs will flash. When the blue LEDs indicator will stop flashing, it indicates that the charge is completed.

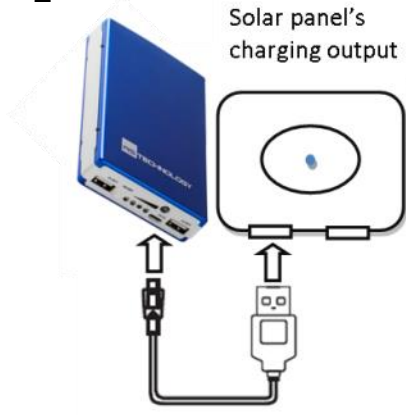


Figure 1
Solar Panel Charging



Figure 2
Adapter Charging

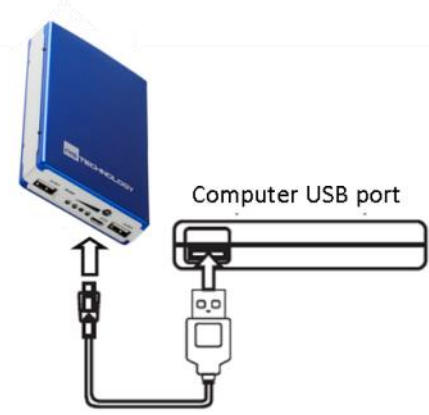


Figure 3
USB Charging

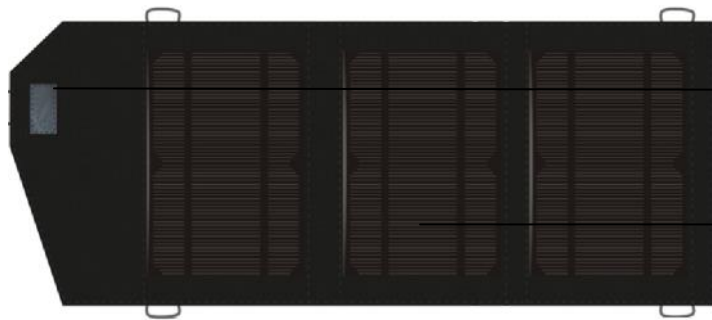
7.4 - How to use the TITAN 50 Power Bank to charge electronic devices

Using the cable or adapter for mobile electronic devices, the electronic switch will be opened automatically and TITAN 50 will start powering the connected device.



8. AS14 DESCRIPTION AND MODE OF OPERATION

8.1- AS14 Overview



SECURE IT

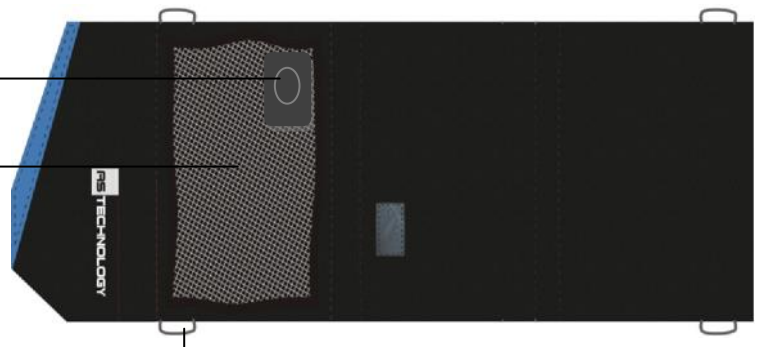
Use the strap to keep the panel tightly packaged up

COLLECT THE POWER

Highly efficient solar cells deliver up to 14W of power

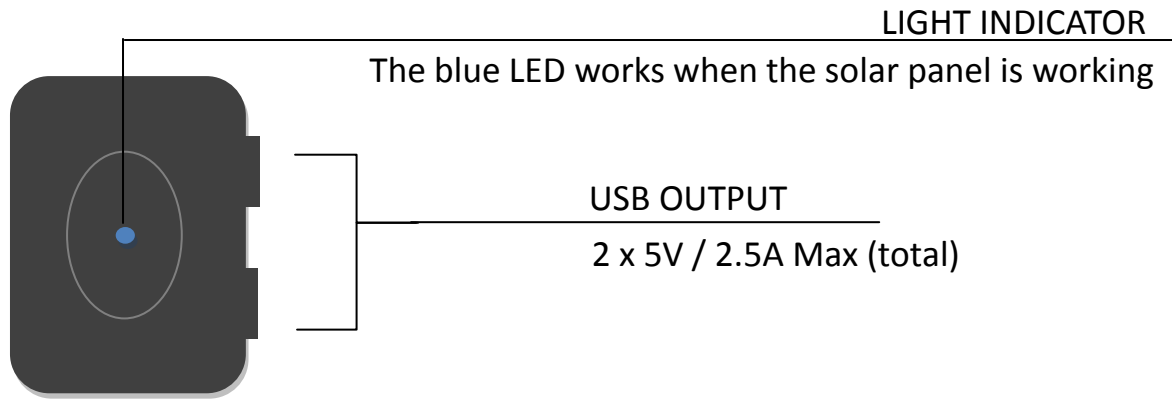
USB OUTPUT PORT
Charge your 5V USB device

SAFETY NET
Keep your USB devices in safe place



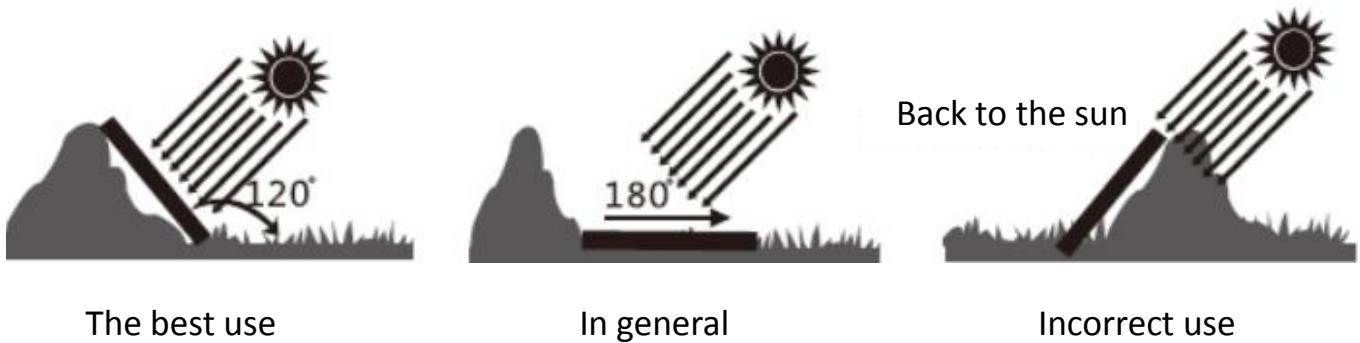
TO HOOK
The loops allow to hook the solar panel easily

8.2- AS14 Charging Output



8.3- AS14 Solar Panel can charge several USB devices

If you charge with solar energy, please unfold the solar panel, upturn the solar board side and put it directly under the sunlight.



Then plug the solar panel to your USB device and enjoy the charge.



Always check that the input current specs of the USB device is compatible with those of the device to charge.

9. WARRANTY

The producer guarantees the product against defects in material and workmanship for a period of 12 months.

NOTE: This warranty does not apply to any equipment that has been repaired or altered by any person other than the producer.

In no event will the producer be liable for direct, indirect, special, incidental or consequential damages, resulting from agreement, tort or other legal concept.

10. DECLARATION OF CONFORMITY



DECLARATION OF CONFORMITY

ASTECHNOLOGY S.P.A.
Via Guardia di Rocca, 6
47899 Serravalle
(Repubblica di San Marino)

Declares, under his sole responsibility, that the products

Titan 10; Titan 50

And the solar panels

AS7, AS8, AS9, AS10, AS11, AS12, AS13, AS14, AS15, AS16, AS17, AS18, AS19, AS20, AS21, AS22, AS23, AS24, AS25, AS26, AS27, AS28, AS29, AS30, AS31, AS32, AS33, AS34, AS35, AS36, AS37, AS38, AS39, AS40, AS41, AS42, AS43, AS44, AS45, AS46, AS47, AS48, AS49, AS50, AS51, AS52, AS53, AS54, AS55, AS56, AS57, AS58, AS59, AS60, AS61, AS62, AS63, AS64, AS65, AS66, AS67, AS68, AS69, AS70, AS71, AS72, AS73, AS74, AS75, AS76, AS77, AS78, AS79, AS80.

are in conformity with the provisions of the following EC directives

2014/35/UE - on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits

2014/30/UE - on the approximation of the laws of the Member States relating to electromagnetic compatibility

and the following harmonised standards and technical specifications have been applied:

CEI EN 60950-1(2007)/A11(2010)/A2(2014)/A12(2014)/A1(2014) - relating to the products

CEI EN 61000-6-1(2007) - relating to the products and solar panels

CEI EN 61000-6-3(2007)/A1(2013) - relating to the products and solar panels

CEI EN 61215-1(2006) - relating to the solar panels

Serravalle, 30th of October 2015



Amministratore unico
ASTECHNOLOGY S.P.A.