

8. Replacement Battery

HUBi has been designed so its battery can only be replaced by Solar Technology or its appointed agents. In no circumstances should any other party attempt this process as it will invalidate any warranty. The battery in a HUBi is designed to last between 2 and 5 years depending on levels of use. The cost of a new HUBi battery can be found on www.solartechnology.co.uk under HUBi Accessories. This price includes return postage.

SPECIAL NOTE To improve the interconnection between the HUBi light sockets and the LUMi light connection plug, we have included two adaptors shown on Fig 5/6. Should you notice that by connecting LUMi directly to HUBi the light flickers please attach the adaptors as shown. This will prevent flickering.



Fig 5

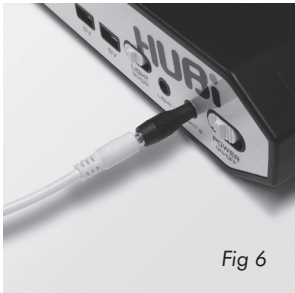


Fig 6

Frequently Asked Questions

1. The solar panel never seems to fully charge HUBi

- Check the panel is not shaded and that it is outdoors. If inside, even if against a glass window, the charge capability of the panel reduces significantly. Also bear in mind a solar panel loses approximately 8 times its summer charging capability in the winter.

2. The power indicator on HUBi never shows 4 bars

- This does not necessarily signify that the HUBi is not full. LED's are not a totally accurate way to measure power and inaccuracies can sometimes be experienced. So long as the HUBi after a full sunshine charge delivers power as indicated in section 3 it is working well.

3. Is there any other way to charge up HUBi other than solar?

- There are two options; charge by mains wall plug or charge by 12v auto plug – see www.solartechnology.co.uk and look under HUBi Accessories.

4. What happens if HUBi gets wet?

- HUBi is not water resistant although is very robust and designed for use outdoor but should it get wet disconnect it from the solar panel and other devices and let it dry naturally indoors for a period of one week. There is a very good chance it will recover without future problems and can be used as normal. However, if it will not work then it must be assumed the battery has been damaged and can be returned to Solar Technology for battery replacement – see section 8.

5. What about if I break something?

- All parts of the HUBi system are replaceable and we have spares at Solar Technology in the UK. In this instance please call +44 (0) 1684 774000 for a quotation.

6. I plugged a device into the 12v auto socket and the HUBi instantly stopped working – is it broken?

- The HUBi 12v auto socket can only deliver a maximum current of 3A. If the device you are trying to power through this socket is higher than 3A, HUBi will close down to protect its circuits. To re-set HUBi, just connect the solar panel to the Solar In socket on the back of HUBi and face the panel to the sun. After a few seconds the HUBi will be re-set and ready to be used.



User Manual

HUBi
SOLAR POWER HUB



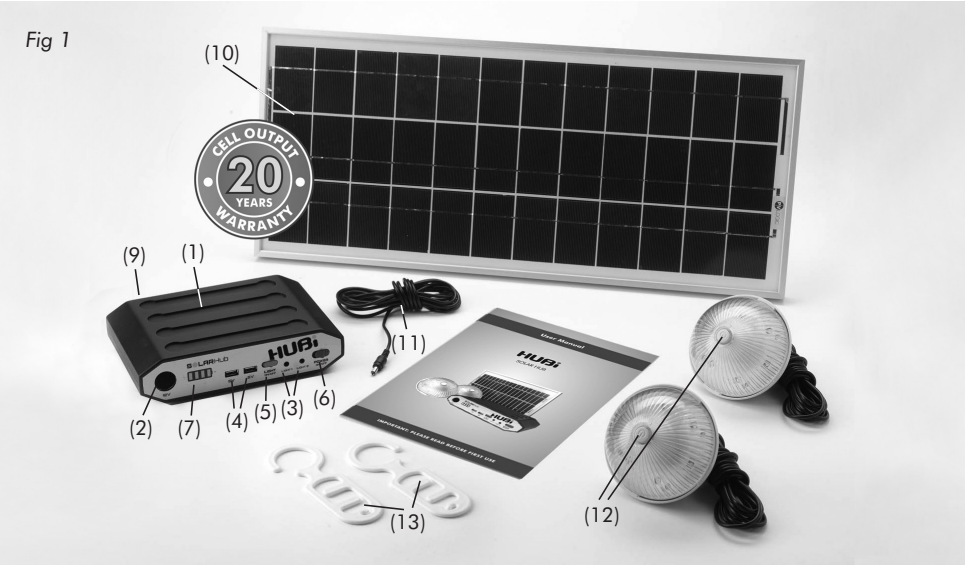
Models:
HUBi102A, HUBi1010A, HUBi1010AE

Congratulations on purchasing the HUBi solar power hub system and another step toward grid independence!

The instruction manual will help you understand how the HUBi works, how to get the best from it, and just as important, its limitations.

IMPORTANT: PLEASE READ BEFORE FIRST USE

HUBi is a sophisticated power station that uses its solar panel to charge its solar hub and this power can then be transferred to its LUMi lights or electrical devices via the sockets found on the front panel of the HUBi. From new and before using it is a good idea to position the solar panel outside or on a sunny window sill and connect its cable to the back of HUBi. This ensures the HUBi has a good charge in it before you need to use it. Alternatively, a mains charge adaptor can be purchased as an accessory – go to www.solartechnology.co.uk



Specification

HUBi Solar Hub2K Kit

- 1 x HUBi Power Hub includes:

 - 2Ah lithium battery pack (1)
 - Intelligent charge electronics
 - 1 x 12v auto socket output - max 3A (2)
 - 2 x 12v in line socket outputs (for Lumi lights) (3)
 - 2 x USB socket outputs - max 2A (for charging 5v devices - phones, tablets etc) (4)
 - Lumi on/off switch (5)
 - System on/off switch (6)
- Battery power indicator (7)
 - Solar charging indicator (8)

1 x 5wp premium crystalline 12v solar panel (not shown) and 2.5m cable to plug into HUBi (11)

1 x Solar panel stand (not shown)

2 x Lumi LED light units with independent on/off switches and each with 4m cable (12)

2 x Lumi hanging hooks (13)

HUBi Solar Hub10K Kit

- 1 x HUBi Power Hub includes:

 - 10Ah lithium battery pack
 - Intelligent charge electronics
 - 1 x 12v auto socket output - max 3A
 - 2 x 12v in line socket outputs (for Lumi lights)
 - 2 x USB socket outputs - max 2A (for charging 5v devices - phones, tablets etc)
 - Lumi on/off switch
 - System on/off switch
 - Battery power indicator
 - Solar charging indicator
 - Interconnection sockets (rear of HUBi) to expand system
- 1 x 20wp premium crystalline 12v solar panel (10) and 2.5m cable to plug into HUBi

1 x Solar panel stand

2 x Lumi LED light units with independent on/off switches and each with 4m cable

2 x Lumi hanging hooks

HUBi Solar Hub 10K Expansion Pack

1 x HUBi Power Hub (specifications as left)

1 x 20wp premium crystalline 12v solar panel and 2.5m cable to plug into HUBi

1 x HUBi Power Hub joining cable

1 x Solar panel stand

1. Positioning the Solar Panel

The panel is designed for outdoor use and comes with a 20 year warranty. Positioning depends on the use – if using it for a camping trip then using the included stand makes sense, but if using in a permanent location (in a garden office or garage for example), fitting the solar panel to a roof or wall might be preferable. The frame of the panel is box section anodised aluminium, so can be drilled if permanent fitting is needed – for a range of brackets go to www.solartechnology.co.uk and look under solar panel accessories. In all events the panel will work best if positioned somewhere between due east and west but for the very best results try and position due south. Shading will have a great impact and should be avoided.

If the included cable is not long enough for the chosen solar panel location to reach the HUBi, 2.5m and 5m cable extensions can be purchased on www.solartechnology.co.uk – look under HUBi accessories.

2. Connecting the Solar Panel to the HUBi

The solar panel is fitted with a 2.5m cable and connector plug. This inserts into the back of HUBi into the socket named Solar In. That’s it – the HUBi will be charged by the solar panel whenever there is daylight and is protected from overcharging by its smart control electronics.

3. HUBi Front Panel

To enable power to be delivered from the HUBi, you must turn it on by sliding the Power Switch (a) to the ON position. Instantly you will see the power indicators illuminate and the four segments (b) each represent 25% of the batteries capacity: 1 segment = 25% charged, 2 segments = 50% charged, 3 segments = 75% charged, 4 segments = fully charged.

If lighting is needed in the area where HUBi is located, the two Lumi lights supplied should be connected into the sockets named Light 1 and Light 2 (c). There is a 4m cable attached to each Lumi to enable each to be positioned where desired. Two hanging hooks (13 Fig 1, page 1) are enclosed to help. To activate the lights you must push the Light Switch (d) to the ON position. The Lumi lights each have a blue push button ON/OFF switch (12 Fig 1, page 1) in the middle of the lens so you can illuminate an area by either using the switch on the Lumi or by using the switch on the HUBi.

If power is needed for charging or running electrical devices there are two USB sockets (e) capable of powering any 5v device such as a smart phone or tablet. There is a single 12v auto socket (f) and devices with a matching plug and compatible power demand can be powered by HUBi if the Power Switch is in the ON position.

Devices you can power or charge from the Hubi are Phones, tablets, torches, lights, fans, in fact most 12v devices that have a car plug and 5v devices that have an USB connection.

For examples of compatible devices that can be powered by HUBi see page 4.

Tip: To maximise the power in your HUBi system when not in use always switch both ON/OFF buttons to the off position. The solar panel will still deliver a charge to the solar hub but the hub itself wont waste any of that power.

SPECIAL NOTE HUBi can deliver a maximum of 3.5A at any one time so if all the power sockets are used and the combined current exceeds 3.5A, HUBi will close down to protect its circuits. To re-set HUBi, just connect the solar panel to the Solar In socket on the back of HUBi and face the panel toward the sun. After a few seconds the HUBi will be re-set and ready to be used. HUBi is not designed to work with an inverter, even a small one. If an inverter is connected to HUBi, the HUBi will close down and will need to be re-set as above. Should the above occur, it will not have damaged HUBi.

	Panel power	Battery size	Charge time	Light time (only 2 x lumi)	Charges ipad (upto)	Charges Phone (upto)	Lights + charging
Hubi 2K	5W	2A	6 - 9 Hours	4 Hours	x2	x3	2 hours light + 1 ipad or 1 to 2 phones
Hubi 10K	20W	10A	7 - 10 Hours	18 Hours	x8	x15	6 hours light + 1 ipad and 1 to 2 phones

4. Expanding a HUBi System (10K only)

The HUBi 10K can be expanded up to two times to a maximum of three interconnected HUBis (Fig 3). This system enables each HUBi to be electrically connected to two other HUBis and equalise the power in each. This is helpful if power demand has increased or power is needed for longer than expected.

The HUBi 10K Expansion Pack is supplied with a solar panel, connection cable & stand, HUBi Power Hub and HUBi joining cable. Additional Lumi lights can be purchased if required on www.solartechnology.co.uk – look under HUBi Accessories.

To install a HUBi Expansion Pack, follow the notes in sections 1 and 2. In addition the HUBi joining cable should be used to attach one HUBi to the next. Insert the cable as shown on the diagram right (Fig 4).

5. Warning

1. Keep HUBi away from fire and don’t allow it to get wet
2. Any severe shock or impact may result in damage and will invalidate the warranty
3. It is strictly forbidden to dismantle HUBi except by Solar Technology personnel or agents appointed by Solar Technology. Any sign of tampering will result in the warranty being terminated.

6. Warranty

All items in this box including the HUBi Power Hub, Lumi and cables are supplied with a 24 month global warranty* except the solar panel, which is supplied with a 10 year module warranty and 20 year performance warranty.

Should a failure occur during this time Solar Technology International Ltd will repair or replace any faulty part, at its discretion.

Solar Technology International Ltd does not accept liability for any 3rd party damage how so ever caused or any costs associated with the return of faulty products.

**Global warranty means if a product is returned to the address below at the sender’s expense and a warranty claim is found to be valid, Solar Technology International Ltd will return the repaired or replaced product to the sender at Solar Technology International Ltd’s expense irrespective of where the sender is located in the world.*

7. Optional Accessories

Solar Technology supplies a comprehensive range of accessories for HUBi, which is constantly being updated. Please visit www.solartechnology.co.uk to view.

1. Lap top adaptor
 2. Apple / HP version
 3. Lumi
 4. Lumi splitter
5. Extension cables
 6. 12v Fan
 7. Expansion kits (Hubi + panel)
8. Hubi boxes (without panel)
 9. Panel and splitter cable (without Hubi)
 10. Camcaddy2

