SPECIAL NOTE Hubi Work 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 Work will close down to protect its circuits. To re-set Hubi Work, just connect the solar panel to the Solar In socket on the back of Hubi Work and face the panel toward the sun. After a few seconds the Hubi Work will be re-set and ready to be used. Hubi Work is not designed to work with an inverter, even a small one. If an inverter is connected to Hubi Work, the Hubi Work will close down and will need to be re-set as above. Should the above occur, it will not have damaged Hubi Work.

8. Expanding Hubi Work
Both the Hubi Work 16 and 64 can be expanded by purchasing a Hubi Work Expansion Kit. Both kits enable more LEDs to be added and increase power input into the Hubi Work, thus ensuing lighting run times are not affected. The original panel is fitted with a special cable that allows and Expansion solar panel to be connected to it. Fix the Expansion panel close to the original and fit using the supplied bracket as described in point 3. Connect the cable on the Expansion panel directly to the original panel. Now the power from both panels will be channeled into the Hub. Connecting the extra LED(s) as explained in point 7.

9. 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.

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

11. Warranty
All items in this box including the SolarHub 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 overleaf 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.

We want your photos and videos!
Here is your chance for you and your Hubi power station to be a star! Just send in pics or videos of you and your Hubi in a great location and if selected we will not only give you ever lasting recognition on our online favourite users wall of fame but we will send you a Freeloader Sixer, 6000mAH solar power bank worth £70 completely free!

Please send to **hello@solartechnology.co.uk** including your address details and best of luck!

Note – we cannot guarantee to publish every entry and only those selected by our marketing department for publication will be awarded a Sixer. By providing your images you automatically grant us the right to use these images or videos howsoever we see fit.

12. 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 light
4. Lumi splitter
5. LED strip light
6. LED bulb and cable
7. Extension cables
8. 12v fan
9. Expansion kits (Hubi + panel)
10. Hubi boxes (without panel)
11. Mains adapter to charge Hubi
12. Camcaddy2

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 looses 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 SolarHub and it instantly stopped working and would not work again.**
- In this instance SolarHub's sockets have been overloaded. The Hub can only deliver a maximum of 3.5A and if more is demanded of it, the Hub will automatically shut down to protect its circuits from overload. To re-set the Hub, disconnect the solar panel cable from the back of the Hub and all cables from the front. Allow the hub a few minutes to cool down (if its hot) and set all the switches on the front of the SolarHub to the Off position. Once cool and assuming its daylight (not heavily cloudy), connect the solar panel cable into the Hub – it will now re-set itself ready to used again and no damage will have been done.

CE FC

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Solar Technology International
Without boundaries

Hubi® Work

User manual

Solar Power Station

Models/Kits:
Hubi16, Hubi64, STP020HUB

Congratulations on purchasing the Hubi power station 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 LED strip 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**

Fig 1
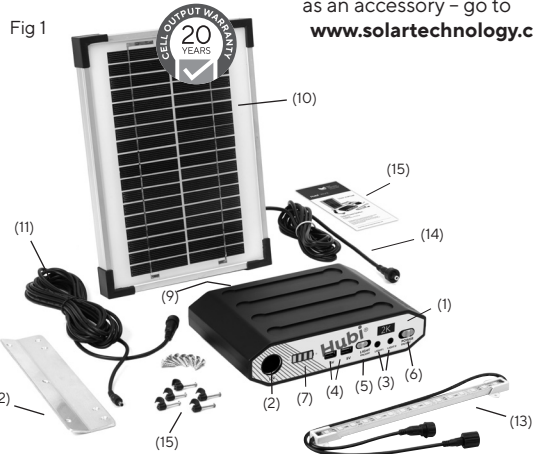
Specification

Hubi Work 16   Part no. Hubi16

1 x Hubi Power Hub includes:
- 2000mAh/12v lithium battery pack (1)
- Intelligent charge electronics
- 1 x 12v auto socket output - max 3A (2)
- 2 x 12v lighting jack (3)
- 2 x USB socket outputs - max 2A (for charging 5v devices - phones, tablets etc) (4)
- Light on/off switch (5)
- Power station on/off switch (6)

- Battery power indicator (7)
- Solar charging indicator (8)

1 x 5w premium crystalline 12v solar panel (10) and 2.5m cable to plug into Hubi (11)
1 x Solar panel Bracket (12)
1 x 300 Lumen LED strip (13) or LED bulb + holder (not shown)
1 x 5m cable from hub to LED strip (14)
Cable fixings & User manual (15)

Hubi Work 64   Part no. Hubi64

1 x Hubi Power Hub includes:
- 10000mAh/12v lithium battery pack (1)
- Intelligent charge electronics
- 1 x 12v auto socket output - max 3A (2)
- 2 x 12v lighting jack (3)
- 2 x USB socket outputs - max 2A (for charging 5v devices - phones, tablets etc) (4)
- Light on/off switch (5)
- Power station on/off switch (6)

- Battery power indicator (7)
- Solar charging indicator (8)

1 x 5w premium crystalline 12v solar panel (10) and 2.5m cable to plug into Hubi (11)
1 x Solar panel Bracket (12)
4x 300 Lumen LED strips (13) or LED bulbs + holders (not shown)
3 x 2.5m cables to interconnect each LED strip together (14)
Cable fixings & User manual (15)

Hubi Work expansion kits

| Part No. Hubi16E	Part No. Hubi64E
1 x 5w solar panel + expansion cable	1 x 10w solar panel + expansion cable
1 x 300 Lumen LED strip or LED bulb + holder	2 x 300 Lumen LED strips or LED bulbs + holders
1 x 2.5m interconnect cable	2 x 2.5m interconnect cables

1. Identifying the best Location for the Solar Panel
The solar panel is designed for permanent outdoor use (please don't position the panel behind a window as this will massively reduce its effectiveness). There is a white ABS bracket in the kit with fixings and this is designed to hold the panel at a steep angle (ideal for winter charging) when positioned against a wall. You need to select a wall where the solar panel wont interfere with your day to day use of the building but also bear in mind the hub needs to be within 2.5m of the cable fixed to the panel.

NOTE – if the Hubi Work needs to be located further from the solar panel than 2.5m, a 5m or 2.5m extension cable can be purchase from www.solartechnology.co.uk The ideal solar panel position is on a south facing unshaded wall but good power generation will still be achieved anywhere from due east to due west (in the southerly half of the compass). Avoid north facing walls and heavily shaded areas.

2. Fixing the Solar Panel
The panel frame is drilled and these holes will match those on the bracket. First attach the solar panel to the bracket (see Fig 2) using the bolts and nuts provided so the panel and bracket are ready to be fixed to the wall in a landscape orientation. Use the self-tapping screws provided to fix the panel and bracket to a wall made of wood. If fixing to a wall made from other materials some rawlplugs may be needed (not supplied). A hole will need to be drilled to thread the cable from the outside of the building to the inside. Once the cable is inside it's a sensible precaution to fill the hole around the cable with Polyfiller or similar.

Fig. 2
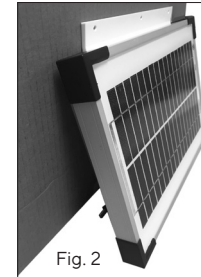
3. Positioning Hubi
The Hubi Work is not waterproof so needs to be protected from direct contact with water. It also need protection against horses or other livestock. Therefore choose a location that affords the best protection for example; under a manger, on a high self, behind a stud wall or even construct a basic cupboard to house the hub. Alternatively a powder coated metal bracket can be purchased that completely protects the hub and its cables allowing the hub to be safely fixed to any wall – see www.solartechnology.co.uk The hub needs to be within 2.5m from the solar panel and can be extended (see point 2).

4. Connecting the Solar Panel to Hubi
The solar panel is fitted with a 2.5m cable and connector plug. This inserts into the back of Hubi Work into the socket named 'Solar In' (1). That's it – the Hubi Work will be charged by the solar panel whenever there is daylight and is protected from overcharging by its smart control electronics. You can also charge the Hubi Work from the mains if you purchase a separate mains charger available at **www.solartechnology.co.uk**. This is plugged this into the 'Aux input' (2).

If you have a Hubi Work 64 the you will also see a 3rd connector on the rear of the HUBi. This connector allows you to connect multiple Hubi Work 64s together giving you more storage power and outputs. Simply connect the 'output' (3) on one unit to the 'Aux input' (2) on the other unit with the supplied cable.

Hubi Work 16

(1)   (2)

Hubi Work 64

(1)   (2)   (3)

5. Connecting the LED(s) toHubi
The supplied Hub-to-LED cable is 5m long so consider where the LED light unit is to be positioned. It's worth holding the illuminated LED in the dark room before fitting so you can decide which location will give the best illumination. The plug end of the 5m cable connects into socket C named Light 1on the Hub. Now fix the cable to wall and ceiling using the panel pins supplied until you arrive at the chosen location of the LED. The cable end has a mating connector to the LED so join the two together and fix the LED in position.

Fig 3
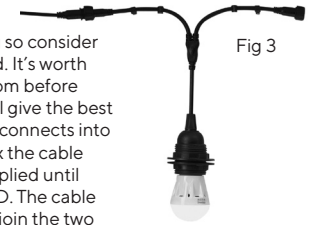
If the cables are exposed from interference from a horse or other livestock, conduit or some form of encapsulation should be considered to provide protection. You may have either purchased this kit with an LED strip/s or an LED bulb/s and holder/s. If this kit contains the LED strip this can be screwed to the ceiling or wall using the self-tapping screws. If the LED bulb and holder, this can be fixed in position using panel pins (see Fig 3). A lampshade can be fitted to the bulb holder in the same way as you would in the home.

6. Operating the Hubi Work System
To enable power to be delivered from the Hubi Work, 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.

Fig 4

(f)   (b)   (e)   (d)   (c)   (a)
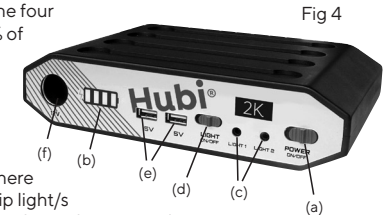
If lighting is needed in the area where Hubi Work is located, the LED strip light/s supplied should be connected into the sockets named Light 1 or Light 2 (c). There is a 5m cable attached to the first LED strip or if you have more than one LED strip the LED strips can be daisy chained to enable each to be positioned where desired. To activate the lights you must use the switch on the Hubi Work (d).

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 Work 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 (please see special note in below).

Tip: To maximise the power in your Hubi Work 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 won't waste any of that power.

7. Adding Additional LEDs (if the Hubi Work 64 has been purchased or a Hubi Work Expansion Kit)
Where either of the above have been purchased, both are supplied with additional 2.5m extension cables and LEDs. Simply connect the extension cable to the first LED and then the LED to the extension and so on.

SPECIAL NOTE Charging the Hub from New If from new there is only one bar or no bars showing on the hub battery meter, it will be necessary to allow the solar panel to charge the battery before first use. Once it is at least 50% charged, the system can be used.

Please ensure the hub is covered or indoors and the solar panel is outside and tilted at around 45 to 55 degrees, facing as near to south as possible and in an unshaded location. Make sure all of the switches on the hub are OFF and the solar panel cable is plugged into the Solar In socket on the back of the hub.

Charge-up times from flat to full: Hubi Work 16 (summer 1 day / winter 4 days)   Hubi Work 64 (summer 3 days / winter 12 days)

NOTE – once either hub is showing 2 bars of charge (50% full) it can be used. Thereafter, the solar panel will generate sufficient power in the hub each day, even during winter to provide light for 1 to 2 hours each night. If longer lighting times are needed (in the winter) please consider adding a Hubi Work Expansion solar Panel, which will provide twice the solar power, thus doubling the nightly run time.