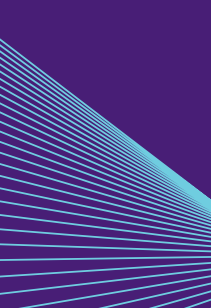




Solar  
Technology  
International

# Off Grid Power Without Boundaries

Solar Panels  
Power Stations  
Lithium Batteries



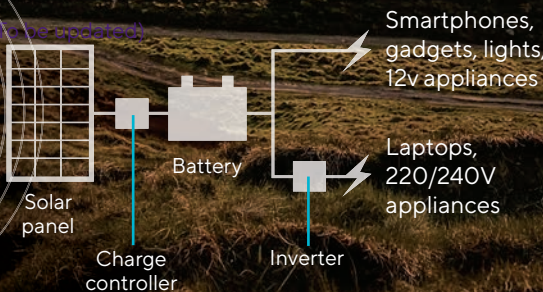
# A Passion for Solar

**Our passion for solar energy sets our customers free!**

**With our premium solar panels converting the sun's energy into electricity, they have the resources to power their action-packed lifestyles.**

**Whether that's to light up a campervan at night, run a yacht's navigation equipment, power a 12v TV in a caravan or charge a smartphone in a summerhouse, solar makes it work.**

*(to be updated)*



## PV Logic®

Rigid/Fold-up/Flexi

Our range of PV Logic Rigid, MHD and Fold-up solar panels are specially designed for RVs, caravans, sea craft, narrow boats, industrial and commercial applications. See **pages 4 to 7**.

For marine, campervan and applications where a semi flexible, extreme environment solar panel are a must, see **pages 8 and 9** for the PV Logic Flexi range.

Pair your solar panel with the PV Logic MPPT Pro charge controller to maximise charging performance. See **page 12**.

## Lifos®

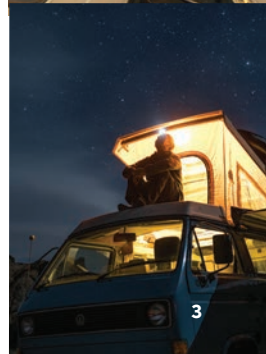
Lifos is our advanced, lightweight lithium battery with a lifespan six times longer than the equivalent gel or lead acid battery. See **page 13**.

## Hubi®

Go/Work/Retro

Hubi is a plug and play solar powered lighting and power station ideal for camping as well as sheds, workshops, summer houses and outbuildings without mains power.

See **pages 14 & 15**.







### PV Logic Rigid advantages

- Premium crystalline solar cells
- Weatherproof
- Industry leading warranties
- Wide range of accessories



## Premium Performance for Off Grid Living

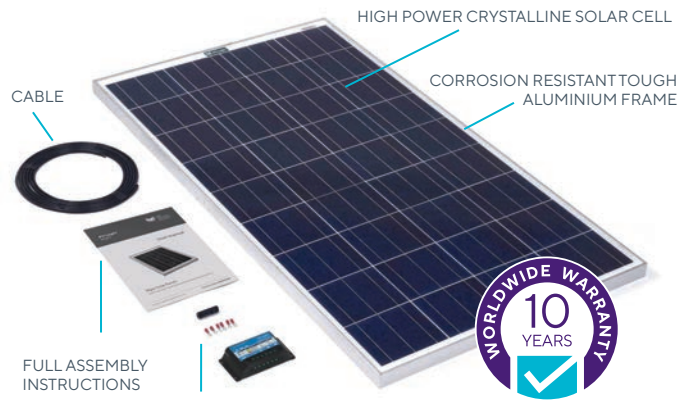
### Choose from our range of premium solar panel kits

From 5W to 200W, the PV Logic range of rigid solar panels is designed for caravans, motorhomes and remote power systems.

The premium crystalline technology is designed to withstand the harshest of environments and weather conditions. All panels carry a 20-year cell output warranty and a 10-year module warranty.

Fixing options include the standard aluminium brackets, premium PVU panel mounts or premium aluminium aero fixings.

The PV Logic rigid range is available as a ready-to-install panel with cabling, or as a roof or deck top kit complete with dual battery charge controller, roof brackets, adhesive, cabling, fuses and connectors. All options include full fitting instructions.



ALL CONNECTORS AND OPTIONAL 12V/24V DUAL BATTERY CHARGE CONTROLLER\* (STP020 AND ABOVE)

(STP120MA shown)

### Roof Brackets

Choose between Standard, Premium and Aero options



### Technical Information

**Notes:**

\* All Roof/Decktop kits include a standard PWM charge controller. An upgrade to the MPPT Pro charge controller is available, which adds the suffix 'PT' to the Part Number.

\*\*Based on average UK weather conditions

Power	Part Numbers					Size	Weight (Kg)	Typical Watts per day**	Charge Controller req'd
	Basic Kit	inc. Charge Controller	Roof/Decktop Kits*						
			Standard Fixings	Premium Fixings	Aero Fixings				
<b>5W</b>	STP005	N/A	N/A	N/A	N/A	250 x 200 x 25mm	0.7	32.5	No*
<b>10W</b>	STP010	N/A	N/A	N/A	N/A	397 x 280 x 25mm	1.3	65	No*
<b>20W</b>	STP020	STP020MA	STPMH20 (PT)*	STPMH20PB (PT)*	STPMH20AE (PT)*	540 x 278 x 25mm	1.7	130	Yes - 10 Ah
<b>30W</b>	STP030	STP030MA	STPMH30 (PT)*	STPMH30PB (PT)*	STPMH30AE (PT)*	660 x 380 x 25mm	2.7	195	Yes - 10 Ah
<b>45W</b>	STP045	STP045MA	STPMH45 (PT)*	S5PMH45PB (PT)*	STPMH45AE (PT)*	634 x 535 x 25mm	3.6	293	Yes - 10 Ah
<b>60W</b>	STP060	STP060MA	STPMH60 (PT)*	STPMH60PB (PT)*	STPMH60AE (PT)*	670 x 640 x 35mm	4.5	390	Yes - 10 Ah
<b>80W</b>	STP080	STP080MA	STPMH80 (PT)*	STPMH80PB (PT)*	STPMH80AE (PT)*	835 x 670 x 35mm	6.7	520	Yes - 10 Ah
<b>100W</b>	STP100	STP100MA	STPMH100 (PT)*	STPMH100PB (PT)*	STPMH100AE (PT)*	1005 x 670 x 35mm	7.8	650	Yes - 10 Ah
<b>120W</b>	STP120	STP120MA	STPMH120 (PT)*	STPMH120PB (PT)*	STPMH120AE (PT)*	1195 x 670 x 35mm	9.2	780	Yes - 10 Ah
<b>150W</b>	STP150	STP150MA	STPMH150 (PT)*	STPMH150PB (PT)*	STPMH150AE (PT)*	1475 x 670 x 35mm	11.1	975	Yes - 10 Ah
<b>200W</b>	STP200	STP200MA	STPMH200 (PT)*	STPMH200PB (PT)*	STPMH200AE (PT)*	1850 x 670 x 40mm	14.8	1300	Yes - 20 Ah

# PV Logic® Rigid Solar Panels-MHD

## Mono High Density Rigid Solar Panels

### Next Generation Solar Panels

Using the latest solar cell technology, PV Logic MHD Panels are nearly 20% smaller and lower in weight than a conventional solar panel of the same power output. MHD technology also reduces shading losses and hot spots.

A smoke black finish is complimented by the MHD aero fitting bracket designed to let the panel hug a vehicles roof line as closely as possible reducing drag and eliminating wind noise.



ALL KITS INCLUDE A FIXING KIT AND INSTRUCTION MANUAL  
(STPU120MA shown)

CHARGE CONTROLLER (OPTIONAL)

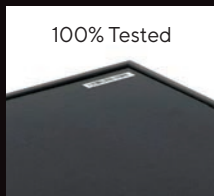
MHD AERO FITTING BRACKETS (AVAILABLE SEPERATELY)



Sleek and smart

### MHD Advantages

- Smaller
- Lighter
- Lower profile
- Stylish looks



100% Tested

## Mono High Density Solar Panels

Power	Part Number		Size (mm)	Weight (Kg)	Typical Watts per day*
	Panel Kit	Roof Top Kit			
120W	STPU120	STPUMH120	988 x 670 x 30	7.6	780
155W	STPU155	STPUMH155	1310 x 670 x 30	9.6	852

\*Based on average UK weather conditions

# PV Logic® Fold-up

## Narrowboat Rooftop Kits

Our narrowboat kits include a specially designed bracket to ensure that the solar panel is fixed to the roof at the ideal angle to deliver optimum performance. All kits come with everything needed for installation.



## Portable Fold-up Kits

The PV Logic range of fold-up panels is the perfect portable system and is quick and easy to use. Each panel has its own integrated stand, charge controller and battery connectors, plus a weatherproof bag. Available in three sizes - 40, 60 & 90W.



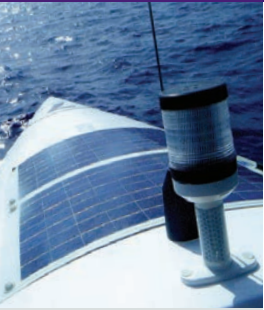
## Narrowboat Rooftop Kits

Power	Part Number	Panel Size (mm)	Weight (Kg)	Typical Watts per day*	Charge Controller Included
	Standard				
45W	STBBK45	634 x 535 x 25	3.6	293	10 Ah
60W	STBBK60	670 x 640 x 35	4.5	390	10 Ah
80W	STBBK80	835 x 670 x 35	6.7	520	10 Ah
100W	STBBK100	1005 x 670 x 35	7.8	650	10 Ah
120W	STBBK120	1195 x 670 x 35	9.2	780	10 Ah
150W	STBBK150	1475 x 670 x 35	11.1	975	10 Ah
200W	STBBK200	1850 x 670 x 40	14.8	1300	20 Ah

## Portable Fold-up Solar Panels

Power	Part Number	Size closed (mm)	Weight (Kg)	Typical Watts per day*	Charge Controller Included
8W	STFP8	230 x 200 x 20	0.6	52	Not needed
40W	STFP40	500 x 353 x 76	7	260	Yes
60W	STFP60	500 x 500 x 76	8.5	390	Yes
90W	STFP90	700 x 520 x 76	11.5	585	Yes

\*Based on average UK weather conditions



**PV Logic Flexi advantages**

- Self-healing top surface
- Completely waterproof
- Cells protected from hot spots
- Easy to install



## Flexible, Lightweight, Robust

The PV Logic Flexi is the ultimate choice for flat or slightly curved surfaces where a robust, low profile and lightweight panel is needed. This semi-flexible panel is ideal for buoys, boat decks, camper vans and anywhere a discreet solar panel is preferred.

The self-healing top surface is completely waterproof and is salt spray water tested to ASTM 8117-ISO 9227 as well as being UV tested to ISO 4892. The easy fix panels carry a two year worldwide warranty.

The PV Logic flexi range is available as a ready-to-install panel with cabling, or as a roof or deck top kit complete with dual battery charge controller, adhesive, cabling, fuses and connectors. Both options come with full fitting instructions.



### 100W and 150W panels



- Choice of black or white backsheet
- Front or rear cable exit option on 100w and 150w panels.

### Creating a Multi Panel System

If a solar system needs to be expanded or fitting multiple smaller panels rather than one big panel is required, a mini solar array can easily be created by connecting two, three, four or more panels together.

Visit the Downloads section at [www.solartechnology.co.uk](http://www.solartechnology.co.uk) and click on 'Creating a Mini Solar Array'.

Power	Part Number			Size (mm)	Weight (Kg)	Typical Watts per day*	Colour/ Cable Exit Point	Charge Controller required
	Basic Kit	inc. Charge Controller	Roof/ Decktop Kit					
5W	STPVF005	N/A	STPVFRT005	240 x 250 x 3	0.36	32	White/Top	No†
10W	STPVF010	N/A	STPVFRT010	380 x 250 x 3	0.56	65	White/Top	No†
20W	STPVF020	STPVF020MA	STPVFRT020	475 x 345 x 4	0.79	130	White/Top	Yes - 10 Ah
60W	STPVF060	STPVF060MA	STPVFRT060	1450 x 315 x 4	3.00	390	White/Top	Yes - 10 Ah
80W	STPVF080	STPVF080MA	STPVFRT080	806 x 665 x 4	3.75	520	White/Top	Yes - 10 Ah
100W†	STPVF100	STPVF100MA	STPVFRT100	980 x 650 x 4	4.20	650	White/Top & Rear Black/Rear only	Yes - 10 Ah
120W	STPVF120	STPVF120MA	STPVFRT120	1160 x 665 x 4	5.60	780	White/Top	Yes - 10 Ah
150W†	STPVF150	STPVF150MA	STPVFRT150	1475 x 665 x 4	6.70	975	White/Top & Rear Black/Rear only	Yes - 10 Ah

**Notes:** \* Based on average UK weather conditions  
 \*\* No charge controller needed for 5wp/10wp panel if the battery is over 70Ah  
 † The 100w and 150w have a rear of panel cable exit point and are supplied with a remote shading diode assembly. Available with a white back sheet or all black.

# Which Panel? Use this chart to find the right panel for you

VEHICLES					
Small Caravan / Camper Van			Large Motorhome / Large Caravan		
PEOPLE	SEASON	USAGE	PANEL NEEDED (FLEXI/RIGID/FOLD UP)	USAGE	PANEL NEEDED (FLEXI/RIGID/FOLD UP)
2 PEOPLE	SPRING SUMMER AUTUMN	Battery Maintenance when not used	5w, 8w or 10w	Battery Maintenance when not used	5w, 8w or 10w
		Lights / water pump only	10w	Lights / water pump / radio / cd	40w
		Lights / water pump / col TV - 2 hrs / 4 hrs per day	20w / 30w	Lights / water pump / TV - 2hrs per day / (3 hrs) or 240v appliances	60w/80w
	ALL YEAR ROUND	Lights / water pump only	40w	Lights / water pump / radio / cd	60w
		Lights / water pump / col TV - 2 hrs per day	40w	Lights / water pump / radio / TV - 2 hrs per day	80w
		Lights / water pump / col TV - 4 hrs per day	60w	Lights / water pump / TV (3 hrs) / 240v appliances	100w
4-6 PEOPLE	SPRING SUMMER AUTUMN	Lights / water pump only	20w	Lights / water pump / radio / cd	60w
		Lights / water pump / col TV - 2 hrs per day	30w	Lights / water pump / radio / TV - 2 hrs per day	80w
		Lights / water pump / col TV - 4 hrs per day	40w	Lights / water pump / TV (3 hrs) / 240v appliances	120w
	ALL YEAR ROUND	Lights / water pump only	40w	Lights / water pump / radio / cd	100w
		Lights / water pump / TV - 2 hrs per day	60w	Lights / water pump / radio / TV - 2 hrs per day	120w
		Lights / water pump / col TV - 4 hrs per day	80w	Lights / water pump / TV (3 hrs) / 240v appliances	150w or 200w

BOATS AND NARROWBOATS					
PEOPLE / LOCATION	USAGE	PANEL NEEDED (FLEXI/RIGID/FOLD UP)	PEOPLE / LOCATION	USAGE	PANEL NEEDED (FLEXI/RIGID/FOLD UP)
16-22ft 2 PEOPLE SINGLE BATTERY INSHORE	Battery Maintenance when not used	5w, 8w or 10w	16-22ft 4-6 PEOPLE OFFSHORE	*Nav light, domestic lights, waterpump, *VHF radio	60w
	Battery top up, bilge / water pump	20w		*Nav light, domestic lights, waterpump, *VHF radio, TV 2 hrs	80w
	Battery top up, lights, waterpump, *VHF	30w		*Nav light, domestic lights, waterpump, *VHF radio, TV 3 hrs	120w
22-45ft 4 PEOPLE DUAL BATTERY COASTAL	*Nav lights, *VHF radio, CD, waterpump	40w or 45w	NARROWBOAT Live aboard all year round	Lights, waterpump, *VHF radio, CD	100w
	*Nav lights, *VHF radio, CD, waterpump, TV 2 hrs	60w		Lights, waterpump, *VHF radio, CD, TV 2 hrs	120w
	*Same as above, TV 3 hrs, 240v appliances	80w		Lights, waterpump, *VHF radio, CD, TV 3 hrs, 240v appliances	150w or 200w

\*Assumptions: AIS and VHF on standby, Nav lights are LED.

NOTE - Where a 24v battery bank needs to be charged, joining two 12v solar panels in series will achieve this. Similarly if more current is needed, two or more 12v panels can be joined in parallel e.g. 150w + 150w + 150w = 450w at 12v. A multi panel solar array can also both charge 24v batteries and increase current.

If an additional hour's TV is needed or you use an inverter to power any devices, go up one panel size.



## Charge Controllers

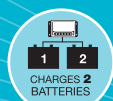
The PV Logic range of charge controllers includes our high performing PWM technology and, for the ultimate in rapid solar charging, the all new MPPT Pro. Both are capable of charging 12V and 24V single or dual batteries.

The MPPT Pro charge controller increases solar yield by up to 20% over a standard charge controller by artificially modifying the voltage from a solar panel system to actively match any battery's requirements. This means that whatever the weather conditions your panels will deliver maximum power with minimum electrical loss.

## New Generation Battery Technology

The range of Lifos advanced lithium batteries delivers long lasting power in a super lightweight package. Making use of the premium in lithium battery chemistries – Lithium Iron Phosphate (LiFePO<sub>4</sub>) – the battery is perfect for a wide variety of high cycling charge and discharge applications. It is the perfect leisure battery for caravans, motorhomes, campervans and boats.

For more information visit [www.lifos.co.uk](http://www.lifos.co.uk)



LONG LIFE



POWERFUL



LIGHTWEIGHT



ECONOMICAL



### Remote monitoring

The MPPT Pro charge controller comes with its very own free-to-download Bluetooth App (Apple and Android) to display how the solar system is performing. The app software links your smartphone to the MPPT Pro and shows performance figures for a single or dual battery/batteries – very useful in a motorhome where the system can intelligently charge the leisure and the starter batteries.

An optional Activity Monitor is also available to provide all performance data on a LCD display.



### Benefits of the Lifos BMS

The integrated Battery Management System (BMS) within Lifos means it can:

- Operate heavy loads
- Be charged by all lead acid battery chargers, vehicle alternators and solar panels
- Give faster charge up times
- Protect batteries from deep discharging
- Monitor the charge and discharge of the battery through a free to download Bluetooth app (Apple and Android)



FREE BLUETOOTH APP



## The Hubi Lighting and Power Station

**A reliable and robust solar hub to provide illumination and power where no grid power exists.**

Each Hubi kit contains everything you need to generate and deliver power and light in remote locations. Easy DIY plug and play installation and totally safe, Hubi is used in stables, for family camping, glamping yurts, garden buildings and in remote African villages.



Hubi 2K

What can Hubi power?		
Device	2000mAh/12v Hub	10000mAh/12v Hub
40lm Lumi Light	Up to 44 hrs	Up to 220 hrs
300lm LED Strip	Up to 6 hrs	Up to 29 hrs
80lm Vintage Bulb	Up to 22 hrs	Up to 110 hrs
350lm Vintage Bulb	Up to 5 hrs	Up to 25 hrs
Smart Phone	3 charges	15 charges
Tablet	1.5 charges	7 charges
HUBi Fan	Up to 1.5 hrs	Up to 7.5 hrs
12v TV	No	Up to 7 hrs
12v Portable Shower	Up to 1 hr	Up to 5 hrs
<b>Charge Hubi from flat to full from solar panel in average UK weather conditions:</b>		
5w solar panel	5 - 8 hrs	19 - 30 hrs
10w solar panel	2.5 - 4 hrs	10 - 15 hrs
20w solar panel	1.5 - 2 hrs	5 - 8 hrs

### Accessories

A wide variety of accessories are available for Hubi, including expansion packs, laptop charge adapter, fan, wall fixing bracket, extension cables and lights. Please go to [www.solartechnology.co.uk](http://www.solartechnology.co.uk) for further details.

### Hubi Go

#### Portable solar hub and lighting kit

A perfect power and lighting solution for a wide range of activities such as camping, home and garden, adventurers' base camps, scientific field HQs, home emergencies etc.

##### Hubi 2K

2000mA/12v hub, 5w solar panel & stand, 2 x Lumi lanterns (40lm).

##### Hubi 10K

10000mA/12v hub, 20w solar panel & stand, 2 x Lumi lanterns (40lm).

### Hubi Work

#### Solar hub and easy fit lighting kit

Easy to fit lighting and power for stables workshops, sheds and garages - in fact anywhere there is no grid connection.

The easily expanded Hubi Work range uses bright ceiling or wall mounted 300lm LED strip/s for excellent illumination - essential in all remote workspaces. Hubi Work 16 illuminates a single room of up to 16m<sup>2</sup> and Work 64 a room of 64m<sup>2</sup> or four 16m<sup>2</sup> rooms.

##### Hubi Work 16

2000mA/12v hub, 5w solar panel & wall bracket, 1 x LED strip (300lm) and cables.

##### Hubi Work 64

10000mA/12v hub, 10w solar panel & wall bracket, 4 x LED strips (300lm) and cables.

### Hubi Retro

#### Solar hub and vintage lighting kit

Designed to provide 'warm tone' lighting without any loss of illumination. Ideal for summer houses, glamping structures or anywhere requiring softer lighting. Also provides power for mobile device charging.

##### Hubi Retro 1

2000mA/12v hub, 5w solar panel & wall bracket, table lamp & ceiling light both with 80lm vintage bulbs.

##### Hubi Retro 2

10000mA/12v hub, 10w solar panel & wall bracket, table lamp with 80lm vintage bulb & ceiling light with 350lm vintage bulb.

##### Hubi Retro 3

10000mA/12v hub, 10w solar panel & wall bracket, table lamp with 80lm vintage bulb, floor light & ceiling light both with 350lm vintage bulbs.

Hubi Work



Hubi Go



Hubi Retro





# Without boundaries

We never stand still in our pursuit of ground-breaking applications for off-grid solar technology, or the continuous evolution of its application. We simply don't accept that things can't be done, or done better.

Full details of our brands can be found at [www.solartechnology.co.uk](http://www.solartechnology.co.uk)

**PV Logic® Hubi® SolarMate® PVE Lifos®**

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