

Solar Power Station

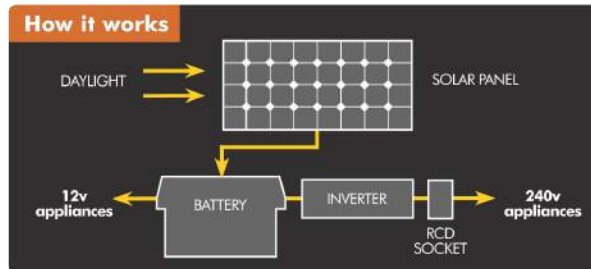
RENEWABLE MAINS-FREE POWER

No mains supply? No problem!

The Solar Power Station (SPS) system is a revolutionary micro renewable energy generator, designed to provide both a supplement to mains fed power and also complete independence from the grid.

The SPS range is purpose designed to provide power where installing mains cable would otherwise be far too expensive or inconvenient. Such uses are garden offices, workshops/garages, building site huts, agricultural buildings, stables, sports facilities (such as cricket pavilions), garden sheds, summer houses, beach huts, static caravans – the list is endless!

Let's not forget the home! Many smart homeowners and business are installing SPS systems to work independently of their existing grid supply to not only provide insulation from the inevitable cost increases in energy but also to provide a guaranteed electricity supply in the event of power cuts.

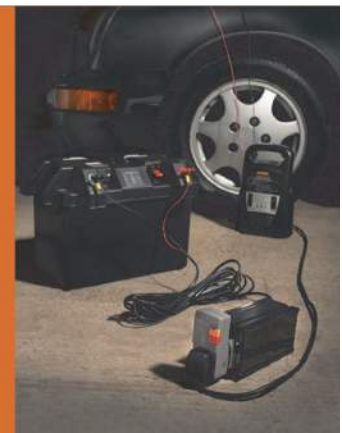


Suitable for:

- Garden offices
- Workshops/garages
- Building site huts
- Agricultural buildings
- Stables
- Sports pavilions
- Garden sheds
- Summer houses
- Beach huts
- Static caravans



Six easy steps to self sufficiency



A kit for every job

Solar Power Station is available in four sizes as follows:

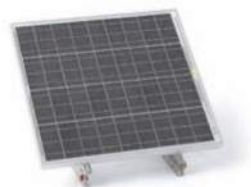
SPS60 UP TO 300 WATT HOURS PER DAY

• 60wp solar panel • 12ah charge controller

Suitable for:

Panel dimensions: 694 x 669 x 35mm

- GARAGES
- WORKSHOPS
- STABLES
- AGRICULTURAL BUILDINGS
- GARDEN SHEDS
- BEACH HUTS



Typical uses: Lighting, power tools, power tool battery charging, radio, car vac, horse clippers, alarm systems*

SPS80 UP TO 400 WATT HOURS PER DAY

• 80wp solar panel • 12ah charge controller

Suitable for:

Panel dimensions: 1195 x 540 x 35mm

- HOME
- SUMMER HOUSES
- STATIC CARAVANS
- OCCASIONAL OFFICE USE



Typical uses:

TV's, games machines, DVD players, Sky boxes, table lamps, occasional use on pc/laptop, alarm systems*

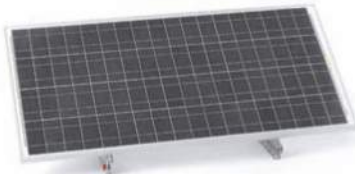
SPS120 UP TO 600 WATT HOURS PER DAY

• 120wp solar panel • 20ah charge controller

Suitable for:

Panel dimensions: 1364 x 670 x 35mm

- HOME OFFICES
- BUILDING SITE HUTS
- SPORTS PAVILIONS



Typical uses:

Lighting, computers, printers, fax, cd player, alarm systems*

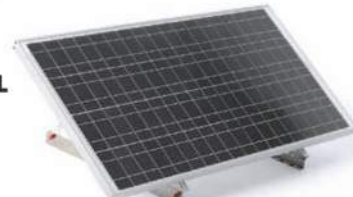
SPS150 UP TO 750 WATT HOURS PER DAY

• 150wp solar panel • 20ah charge controller

Suitable for:

Panel dimensions: 1580 x 805 x 35mm

- GARDENS
- HORTICULTURAL
- CAMP SITES



Typical uses:

Garden lights, general lighting, pond pumps, greenhouse heaters, charging 12v garden machinery (mowers, hedge trimmers, strimmers etc.)*

In addition to the solar panel and charge controller, each kit contains the following core elements:

- Multi position aluminium rack
- 85ah Sealed deep cycle solar battery
- 300W Inverter
- Waterproof battery box
- Digital Multi meter
- RCD Socket
- 20m x 2mm Solar cable bundle
- All connectors, fuses and terminals
- Instruction manual

SPS performance

In the UK, solar works most efficiently in the Spring, Summer and Autumn months. Solar is still effective in the winter but the performance is much reduced. The table below shows the expected performance of an SPS system over 9 months of the year.

SPS System	Peak power per day – summer	Average over 9 months per day
SPS60	300wh/d	153wh/d
SPS80	400wh/d	204wh/d
SPS120	600wh/d	307wh/d
SPS150	750wh/d	383wh/d

*Please note that the above applications are based on typical usage of 2-4 hours per day in Britain. Longer run times may require a bigger kit or the purchase of an SPS Expansion panel. Shorter run times may enable a smaller SPS kit to be selected.



Frequently asked questions

How does an SPS system work?

Using a premium Solar Technology International panel, energy is harvested from daylight and transferred via a sophisticated management system into the deep cycle, ultra safe solar battery. The energy stored in the battery is then available to use as and when required. Power can be delivered as 12v current to power 12v appliances such as garden lights, interior lighting, some lap top computers etc or 240v current through the supplied inverter to power most "plug in" electrical devices most often used in the home and business.

Which SPS system should be selected?

There are four SPS systems in the range, all of which deliver differing amounts of power and selection should be made depending on what appliances need to be powered (refer to the table at the bottom of page 4 for advice). Should, in the future, more power be needed (for example to run your appliances for longer or to run more appliances) an SPS Extension Panel can be purchased and this simply plugs directly into the Power Box. Therefore "daisy chaining" an additional panel couldn't be easier.

How to install an SPS system?

This is very straight forward! All SPS systems and SPS Extension Panels are supplied ready assembled*. First step is to decide on the solar panel location. The panel is supplied with a multi adjustment rack so it can be located on soil, grass, hard standing or a flat roof (full instructions, hint and tips are supplied). A 10m cable, attached to the solar panel, plugs directly into the all-weather Battery Box. A 10m extension cable then plugs into the "power out" socket of the Battery Box and the end of this cable needs to enter into the building or room where the power is needed. The cable then attaches to the inverter and that's it! A standard multi gang extension (not supplied) can then be plugged into the inverter and the SPS is ready to start delivering power.

Can the SPS system be moved?

A great feature of this system is that it is totally portable. The solar panel and rack can be folded flat and the Battery Box is easily carried. Therefore, one SPS can be used in many different locations.

How long will an SPS system last?

A system should last for 35 years. The component parts have varying warranty periods as follows: solar panel – 20 years, battery – 3 years, inverter 2 years the other components have a lifetime guarantee. The consumable elements i.e battery and inverter should last 5+ years and can easily be replaced.

What is the payback time on an SPS system?

This can be immediate if using the SPS as an alternative to installing mains cable – in fact not only will pay back be instant but the costs saved will be enormous! Where the system is being used in premises where mains power already exists, payback will be longer. Of course, the payback time could be significantly reduced depending on future energy price increases.

What is the environmental benefit of using an SPS system?

The environmental benefits are significant. An SPS system will save nearly 2 tons** of carbon emissions over its lifetime – a very impressive amount for a single system! Add in an SPS Expansion Panel and each installation really goes a long way to cutting down on the use of fossil fuels.

What are the benefits of using an SPS system over other micro renewable systems?

- No installation costs
- Limited running costs and virtually no maintenance
- Totally safe
- No noise or vibration
- Planning permission is not required
- Fully portable
- Low costs – long term guarantees

*The solar panel needs to be fitted to the rack and the battery fitted into the all-weather Battery Box – all fixings supplied

**Figure quoted is for the SPS150