

SOLAR iBOOST+



Solar iBoost+ FAQ's

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What can I run from my Solar iBoost+?

Solar iBoost is designed for use with up to 2 immersion heaters each rated up to 3kW for water heating in the home, each immersion is used in turn by the Solar iBoost+. The immersions should have thermostat controls but no electronic controls between the Solar iBoost+ and the immersion. It should only be installed by a qualified electrician.

When does my Solar iBoost+ start putting energy into my hot water tank?

As your PV array starts to generate in excess of your household power requirement the Solar iBoost+ will begin to "dump" energy into your hot water tank. For example if you have 2.2kW of export energy then the Solar iBoost+ will divert this less a small buffer of up to 100W to ensure that the system deals smoothly with the changing use of household energy and the PV array's generation.

What happens if I switch on my kettle and the Solar iBoost+ is working?

The clamp rapidly detects changes between import and export and sends a signal to the Solar iBoost+ to taper back any water heating to maintain minimum export levels. If exports drop below that Solar iBoost+ switches off and waits until exports are restored and it returns to "Heating by Solar." If you have an iBoost Buddy fitted you will see the changes between import and export in the home and know when spare energy is available for use elsewhere.

How will I know how much energy Solar iBoost+ has saved me?

The Solar iBoost+ main unit has a built in display, simply touch any button and the back light illuminates, if energy is flowing "Heating by Solar xx.xxkW" will display. Each press of the display button reveals savings from *Today, Yesterday, Last 7 Days, Last 28 Days, Total Savings*. You can also view this remotely within the home by adding an iBoost Buddy to the system. This connects wirelessly and is also a home energy monitor that displays import and export levels. Visit www.solariboost.co.uk to find out more.

How does the Solar iBoost+ know when my water tank is fully heated?

Immersion elements must contain a thermostat, your electrician will check this. When the set temperature is reached the thermostat operates to switch the element off. The Solar iBoost+ automatically switches over to heat the 2nd immersion if connected and when the immersion(s) is/are satisfied 'Water Tank HOT' is displayed.



Is the Solar iBoost+ a "proportional controller" or a switch?

Solar iBoost+ uses electronic control technology to cleverly allow only the same as the excess power generated to be diverted to the immersion. As this excess energy varies, Solar iBoost+ manages the power levels applied to the immersion up to a maximum of 3kW. It is not an open and close switch.

Can I use the Solar iBoost+ with other renewable technologies such as wind turbines?

Yes, the Solar iBoost+ measures the export at your utility meter so if you regularly export power from your property then this unit is right for you regardless of the generation type.

Does the Solar iBoost+ affect my Feed in Tariff Payments?

In the UK Solar iBoost+ does not affect your *FiT Generation* payments. Where your FiT provider uses a "deemed" usage contract you will normally be paid the additional *Export* tariff based on 50% of the generation reading regardless of whether the energy is consumed or not. Where an export meter is fitted the benefits of the Solar iBoost+ can still easily outweigh the rising energy costs of water heating.

What warranty will I get with the Solar iBoost+ and iBoost Buddy?

Two years.

SOLAR iBOOST+

Can I still switch on my immersion if I need water in a hurry?

Yes the Solar iBoost+ main unit has a "Boost" button. Each press of the button increases the time the grid heats the immersion by 15 minutes and can run up to 2 hours. The time remaining counts down on the display. If you add an iBoost Buddy then you can also press the Boost button remotely within the home, visit www.solariboost.co.uk to find out more.

What's the maximum immersion heater power rating I can use with the Solar iBoost+?

Any immersion element rated up to 3kW is suitable. As the immersion element is a resistive load it will accept any variable amount of power up to its rated maximum. This enables it to accept even the smallest amount of power sent to it from the Solar iBoost+ and start heating water. The Solar iBoost+ has connections for 2 separate immersion heaters, each can be rated up to 3kW and they will operate in turn to heat the water whether they are *Heating by Solar* or are in grid Timed or Boost mode.

Where should the Solar iBoost+ Sender be fitted?

The Solar iBoost+ sender and clamp should be fitted at the household utility meter cabinet. Ensure the clamp's latch is firmly closed around the live feed from the utility meter to the consumer unit. A label on the clamp clearly indicates to the installer how to be sure of fitting it in the correct orientation. The clamp should be fitted on the utility meter side of a Henley block if present.

What is the distance range between the Solar iBoost+ and the wireless sender?

Approx. 500m line of sight, or up to 30m within a building. The strength of the signal can be affected by thick walls in a similar way to a wireless router or a cordless phone in your home.

Is there a repeater available to boost the signal of the Solar iBoost+ sender?

The range of Solar iBoost is effective in most homes and experience to date has been good. A clamp cable extension is available to purchase that can be passed through thick walls to improve signal strength.

What is the life expectancy of batteries in the Solar iBoost+ wireless sender?

Approximately 12-18 months from installation. A warning symbol flashes red *and* the message *Sender Battery Low* appears on the Solar iBoost+ screen advising that the batteries will soon require replacement. If you have an iBoost *Buddy* the signal strength and battery condition are permanently displayed.

Can I run the wireless sender from a grid supply instead of batteries?

Yes. An optional power supply is available to purchase at www.marlec.co.uk and plugs into the Sender alongside the clamp cable. For original Solar iBoost customers a new Sender can be purchased with the power supply and is compatible with the existing clamp and main unit.

How exactly does the Dual Immersion feature work?

The Solar iBoost+ version has a cascading load system. This means that 2 immersions can be connected, the first is the priority and when this is satisfied the free solar energy transfers to the 2nd immersion. A clever feature is that the system checks the condition of the 1st immersion every 15 minutes, if the temperature has fallen the free solar energy reverts to it until it is again satisfied and then returns to the 2nd immersion. This cycle continues until both are satisfied when *Water Tank Hot* is displayed.

Can I view the Solar iBoost+ display elsewhere?

The Solar iBoost+ connects wirelessly with the optional iBoost+ Buddy. This is both a home energy monitor and remote display and control for the Solar iBoost+ giving you convenient and quick access to what's happening with energy in your home. The "eco-gauge" swings to indicate energy consumption or excess and a "traffic light" glows red/amber/ green to let you know if the home is importing and exporting energy.



SOLAR iBOOST+

How do I integrate the Solar iBoost+ with an Economy 7 timer?

The Solar iBoost+ includes a programmable timer for 2 times each day on a 5/2 day basis. This feature can be used to replace existing timers. At the user pre-set times full grid power is diverted to the 1st then 2nd immersion independently of the pv generation. The water may already be partially or fully heated from the day's excess pv power and thus the grid operation may only need to "top up" the pre-heated water.

Can I set up different automatic timed settings other than 5/2?

Yes, a useful feature in Solar iBoost+ is the option to switch rapidly between Winter/Summer/OFF Timed settings. This is useful if you want to use grid power to top up the free hot water but the duration and start time might be different according to the time of year and how you are using any other heating system.

Winter/Summer settings means that you only need to program the times once and just press a button to change the season. This feature is selectable from the remote iBoost *Buddy* where used.

An example of when you might use this is: In the summer when your space heating is off you may want to switch off gas or oil water heating too if your Solar iBoost is delivering most of the hot water you need. You should note that grid power is used during the timed operations. In winter you may not need the timed top up if your gas/oil heating is operating.

Does the Solar iBoost+ need to be installed on a dedicated circuit?

No. As long as the Solar iBoost+ is installed between an isolation switch and the immersion heater.

Can the Solar iBoost+ be installed further away from immersion heater or at the consumer unit?

Yes. Your qualified electrician will need to ensure that no other loads can be connected between the Solar iBoost+ and the immersion.

Does it matter what type of inverter I have installed?

Solar iBoost is compatible with transformer, transformer-less and micro inverters and there is no interference between the two devices.

How can I use a Solar iBoost+ on my three phase system?

There are 2 possible options:

1. Use one Solar iBoost+ on one phase with its own 3kW immersion or resistive load. In three phase systems it is very rare that all phases are equally loaded so we recommend that the installer connects the Solar iBoost+, the clamp and immersion to the phase with the lowest load.
2. Fit one Solar iBoost+ onto each phase, each with up to 3kW of load.

I've heard devices like this can cause flicker; does the Solar iBoost+ have this problem?

The Solar iBoost+ uses a special switching method to switch power into the immersion heater, this technology does not cause flicker on electrical circuits.

What happens if I have a power cut?

The Solar iBoost+ automatically detects that there is no export taking place and stops heating water. It resumes when export is next detected and the built in memory retains the settings and savings to date.

Want to find out more? Watch our YouTube videos at www.solariboost.co.uk