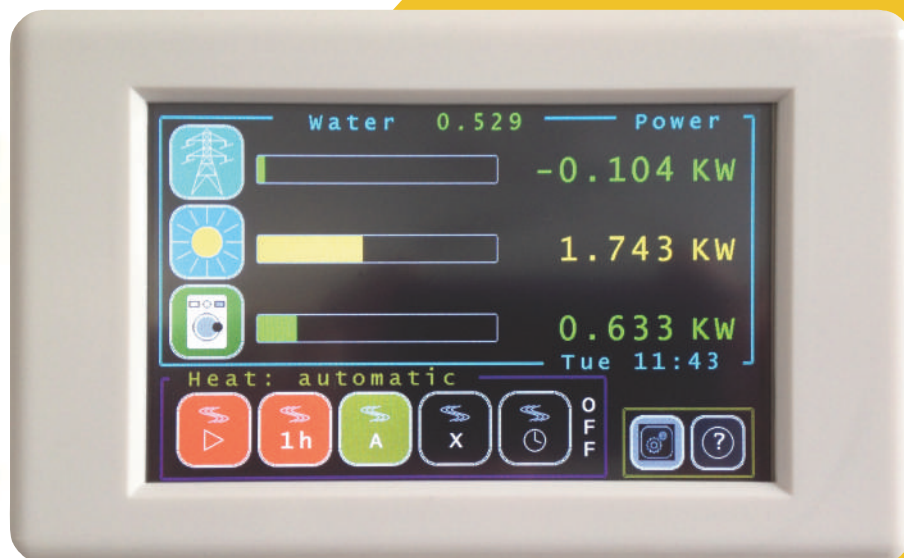


A comprehensive solution for the home.



**solarcache** is a clever device that not only redirects excess energy that the Sun has produced so that it is used in your home and not lost to the Grid, but is also a comprehensive energy monitor.

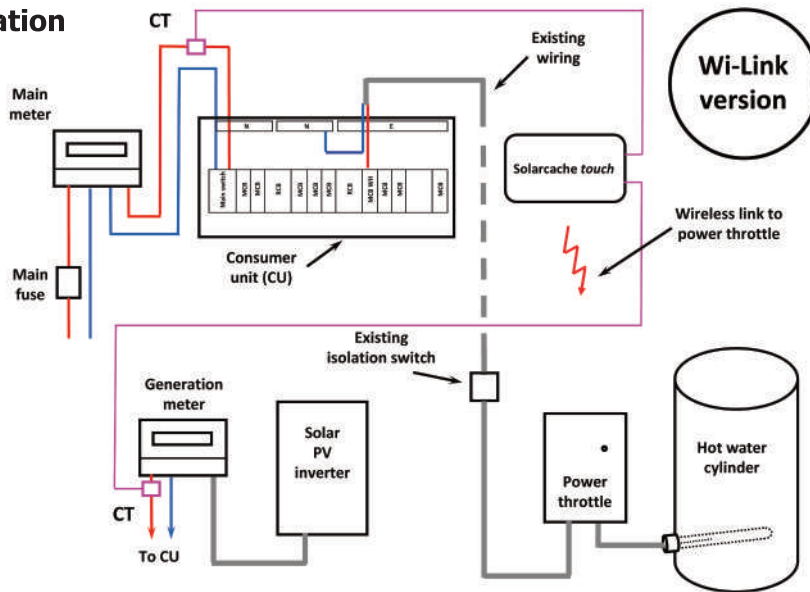
**solarcache *touch*** is our latest device. Attractive and feature rich whilst still easy to install, set up and use.



We have a wealth of supporting documents available on our website: [www.solarcache.co.uk](http://www.solarcache.co.uk) including Installation and User Guides.

Alternatively call us on **01223 440100** for technical support.

## Installation



## solarcache *touch* technical data

<b>Controller</b>	
<b>Screen</b>	5-inch TFT LCD colour, touch sensitive
<b>Manual controls</b>	Graphical buttons on touch-sensitive screen Icons indicate functions Help screens displayed on touching icons
<b>Screen timeout</b>	User settable up to 1 hr, or permanently on
<b>Manual heater functions</b>	Continuous – heater continuously on 1 hr boost – heater on for 1 hour Automatic – heater controlled by SolarCache Off – heater is turned off Timed boost on/off override
<b>Timed heater functions</b>	Up to 7 separate timed boost periods Each boost period can be set to activate on Sun, Mon, Tue, Wed, Thu, Fri, Sat, Mon-Fri, Sat-Sun, or Mon-Sun Each boost period can be directed to the wireless or wired channel, or both
<b>Main screen</b>	Powers shown by bar graphs and numbers (KW) Display of power flow at the main meter in green (export) or red (import) Display of the solar PV generation Display of the surplus power available for use in the house Display of the power being diverted into the currently-connected load
<b>Energy screen 1</b>	Energies shown by bar graphs and numbers (KW) Display of energy bought from the grid since midnight Display of energy generated by the PV panels since midnight Display of energy consumed in the house since midnight
<b>Energy screen 2</b>	Display of energy diverted to the hot-water tank since midnight Display of energy diverted to a second load since midnight
<b>Resilience to power cut</b>	All settings, historical energy data, and time of day preserved through a power failure, and restored when power re-appears
<b>Historical data</b>	Daily data for the last 28 days and accumulated totals since installation can be displayed on screen: <ul style="list-style-type: none"> <li>energy bought from the grid</li> <li>energy generated by PV array</li> <li>energy used in the house</li> <li>energy diverted to the wireless channel</li> <li>energy diverted to the wired channel</li> </ul>
<b>Modular system</b>	The controller and the power throttles are separate units, allowing the controller to be placed in a convenient position for the user, and the power throttle(s) to be placed near the load(s)
<b>Installation</b>	Fully automatic sensing of directions and placements of current transformers Auto-calibration of power throttles and loads connected to each channel, taking under 1 minute to complete Improved accuracy through auto-calibration
<b>Channels</b>	Up to two independent channels: one wireless and one wired Any number of wireless power throttles can be connected to the wireless channel Up to five wired power throttles can be connected to the wired channel
<b>Prioritisation</b>	Excess power can be diverted first to either channel, or to both
<b>Response time</b>	Under 1 second
<b>SD card</b>	Data can be recorded every six seconds for later detailed analysis off-line
<b>Watson display</b>	The wireless version will send data to the Watson display
<b>Housing</b>	White plastic box matches most decors Size: 161 x 97 x 50 mm external dimensions
<b>Weight</b>	330 g
<b>Power supply</b>	9V AC from plug-in power module
<b>Power diverted</b>	Power is diverted to the load(s) whenever the exported power exceeds 50W
<b>Power throttle</b>	
<b>Power supply</b>	220-240 VAC, 50 Hz
<b>Connection to controller</b>	Wireless version has no physical connection to the controller, and can, for example, be mounted in the airing cupboard near the hot-water cylinder The wired version uses a standard screened (audio) cable for connection
<b>Power</b>	The standard version will control a 3 KW load 4 KW and 6 KW versions are available
<b>Cable connections</b>	Screw terminals for the power cables Push-in connections for signal cable (wired version only)
<b>Cooling fan</b>	No
<b>EMI filters</b>	Yes – on both input and output sides
<b>Housing (3 KW version)</b>	White sheet metal case with ventilation grills Size: 175 x 197 x 65 mm overall external dimensions
<b>Weight (3 KW version)</b>	1430 g

Modular in design, solarcache *touch* can be configured in many different ways depending on each household's requirements.

A clip-on sensor (CT) at the electricity meter measures the amount of power flowing, and in which direction. Another sensor measures how much power is being generated by the solar panels. The data produced is all shown on the touch screen unit; solarcache *touch* constantly detects changes in electrical flow to ensure that it is correctly diverted to maximise usage.

The solarcache *touch* **Duo** power throttle can be mounted near the consumer unit where it intercepts the dedicated circuit to the immersion heater.

The solarcache *touch* **Wi-Link** power throttle can be mounted next to the immersion heater where it intercepts the flex between the DP isolation switch in the airing cupboard and the immersion heater.

### Which solarcache *touch* version should I select?

Choose solarcache *touch* **Duo** when the immersion heater has a dedicated circuit with no other equipment connected, and connection to a Watson monitor is not required.

Choose solarcache *touch* **Wi-Link** when the immersion heater is not on a dedicated circuit or it has other equipment connected to it, or if a second heater on a different channel is required, or if connection to a Watson monitor is needed.

**Call 01223 440100**

Find out more at:  
[info@solarcache.co.uk](mailto:info@solarcache.co.uk)

solarcache is brought to you by DSM Energy Control Ltd.

DSM Energy Control Ltd is a partnership of Dr Peter Duffett-Smith, radio astronomer and entrepreneur from the University of Cambridge, and Terry Mann, Managing Director of SolarMerge Electrical Ltd, an electrical contractor and solar PV installer. For more info, please visit [solarcache.co.uk](http://solarcache.co.uk)

 maximising your solar energy usage