

Product Showcase

May 2015



We supply ...

- Solar Thermal Hot Water Kits
- Solar Thermal Products
- Solar Speed Flex
- The Amazing Solar Kettle

contemporaryenergy.co.uk

Invest in Solar – You won't regret it!

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Locations of our solar thermal kits



Locations of our solar kettles



To Order Call: (+44) 01962 735 478

Contemporary Energy Ltd

The Company

Contemporary Energy Ltd was founded in 2008 by James Bentham, an engineer, inventor and entrepreneur. Our company's mission is to help facilitate the wide-spread uptake of practical renewable energy solutions by providing cost effective and reliable solutions. Contemporary Energy imports and distributes quality renewable energy systems direct from the manufacturers, thus cutting out middle-men. We have developed the innovative solar kettle, and are involved in further development of this specifically aimed at developing countries.

Our Aim

Cost-effectiveness is our goal. We pride ourselves on supplying high quality products at very reasonable prices. With ever-increasing energy prices, the economics of renewable energy systems (e.g. solar hot water systems) are now very compelling - a system can pay for itself in just a few years. We import our systems by the container-load direct from the manufacturers. This cuts out the middle-men and enables us to keep our prices low. This is what one satisfied customer had to say:

Thanks for all your help in supplying the equipment and the technical help you gave me setting up the controls. It works like a dream. Even on cloudy, rainy days we have plenty of hot water. Only on the coldest days in winter does the gas boiler kick in to top up the cylinder; even then, only for about ten minutes or so. It's the best purchase I have made for years.

AM (30 tube solar thermal kit) Lafitole, France, September 2013



Solar Thermal DIY Kits

Why Go Solar?

When you install solar water heating in your home, you will reduce your impact on the environment. The system will pay for itself whilst reducing your fuel bills, and will also add value to your property.

Contemporary Energy supply and install state-of-the-art solar water heating systems for domestic, industrial and swimming pool applications. A typical domestic solar hot water system will (over one year) supply ~70% of a household's hot water. Between May-September 95-

100% of the hot water required can usually be supplied by the solar system.

With our rock-bottom prices, some systems can pay for themselves in 3 years! We act as importer and wholesaler. We import our systems by the container-load, direct from the manufacturer, to keep our prices low.



How efficient are the solar thermal panels supplied by Contemporary Energy

Our modern hi-tech panels work brilliantly in the UK climate. They work best in direct sunlight, but still work effectively on diffused solar radiation, and hence contribute well to water heating even on cloudy days. Our hi-tech evacuated tube panels are up to 40% more efficient than more traditional flat-panel solar water heaters and hence can provide more of a contribution to water heating outside of the peak summer season. This type of panel is even used by the British Antarctic Survey for solar water heating!

Can I install this myself?

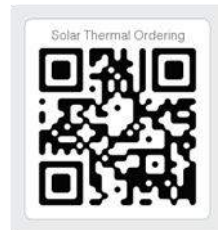
To perform a successful installation of a solar hot water system requires basic DIY, plumbing and to a lesser degree, electrical skills. Many competent DIY enthusiasts have successfully installed our kits following our detailed instructions. We are happy to offer advice during your installation. If you are replacing your hot water cylinder, we advise that you get a plumber to help with that. If you are installing an unvented cylinder it is a legal requirement that this is done by a suitably qualified plumber. The rest of the installation is relatively straight-forward and by installing it DIY you will save thousands of pounds and achieve pay-back earlier.

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Premium Kit



30 Tube Premium Kit
30 tube collector panel and
solar station.



All kits include panel and solar station (combined pumpstation and controller) and, if required, solar speed flex pipe. We can also provide a suitable hot water cylinder. We offer a range of vented and unvented twin coil solar cylinders of all sizes. The 30 tube panel is a good match for use with a 200–300 litre cylinder, but we can advise on system sizing and can tailor your system to your individual requirements.

Solar Speed Flex

Solar Speed Flex has many advantages, not least of which is that it is cheaper and quicker to work with rather than the alternative of using copper pipe in conjunction with high temperature insulation such as Armaflex.

Why Use Solar Speed Flex;

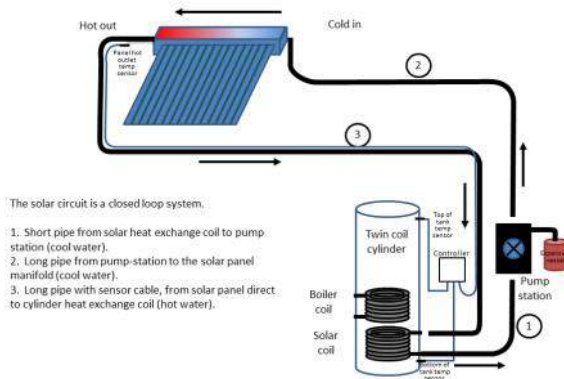
- Easy installation, no soldering, no multiple joints, no bending tools.
- The flow and return can be completed with just one continuous length of pipe each.
- Bends can be made perfectly by hand, and due to the flexible nature of the pipe, complex pipe runs can be completed in minutes.
- Tubes can be cut to exact length.
- No special tools are required for making joints.
- Saves time and effort
- High quality flexible corrugated stainless steel tube
- Aeroflex high temperature EPDM insulation coated with tough black film protects against UV, the weather, bird pecking etc.
- Working temperature -57 °C to 150 °C
- Maximum pressure 17.5 bar
- Can be connected to solar hot water systems with all standard components
- We stock two pipe sizes, DN12 and DN16, in three lengths, 10, 20 and 30 metres
- Cheaper than the traditional labour intensive alternative of copper pipe plus Armaflex HT high temperature insulation.



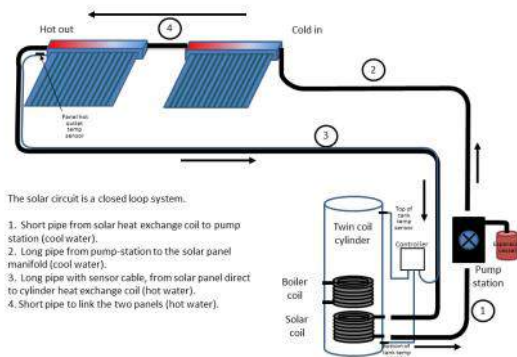
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Simplified Installation ...

One Panel



Two Panels



The Amazing Solar Kettle

Efficiency

In good (UK) sunlight conditions the Solar Kettle will heat water by 4-5 °C every 10 minutes. Hence to get to boiling from cold it can take about 2.5 hours. For a good cup of tea the water should be more than 90 °C.

Using the Solar Kettle daily just requires a little forethought. If you fill it the night before and leave it where it will be in the sun at sunrise, it could be hot by breakfast. If you fill it at 9am it could be hot by noon. Because of the excellent insulation properties of the vacuum tube, the Solar Kettle will retain much heat overnight. Hence you can have water for washing, shaving etc first thing in the morning. In hotter climates than the UK, the times to heat are significantly reduced.



How does the solar kettle work?

At the heart of the Solar Kettle is an evacuated vacuum tube. This absorbs solar energy, converting it directly into heat which heats the water inside. Each tube is constructed like a Thermos™ flask, so the heat energy goes in but doesn't come out. The vacuum tube consists of two glass tubes made from toughened and heat resistant borosilicate glass. The outer tube is transparent allowing solar radiation to enter. The inner tube is coated with a special selectively-absorbing coating which features excellent solar radiation absorption and minimal emission/reflection properties. Hence the energy goes in, is converted to heat, and is not allowed out. We call this our “Photon Sponge” technology. The insulation properties of the vacuum tube are so good that while the inside of the tube may be 175 °C, the outer tube is cold to touch. This means that the Solar Kettle can perform well even in cold sunny weather.

Where should I place the Solar Kettle?

Place it outside in direct sunlight. The side of the tube should be at right angles to the sun, so that it catches as much sunlight as possible on the sides which are the absorbing surfaces. The foot should be pointing south, and the top pointing north. Try to choose a relatively open spot with no shading where it will stay in the sunshine as the sun moves across the sky. If the Solar Kettle casts a shadow it will be working. It is best if angled at ~45°. (60° in winter, 30° in summer).

Try the Amazing Solar Kettle



Every-day use

The solar kettle can, in good conditions, negate the need for a conventional kettle. Even in conditions of poor sunlight it can still be used to pre-heat the water (e.g. to 55-60 °C) thus saving significantly on the electricity required.

Camping

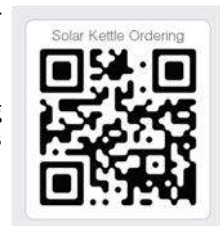
The Solar Kettle gives hot/boiling water wherever there is sunshine. Whether camping in a tent, motor-home, caravanning or on manoeuvres with the army; the Solar Kettle means no more reliance on gas stoves and no more heavy and expensive gas canisters. No dangerous flames. Just an unlimited source of free energy!

Mountaineering

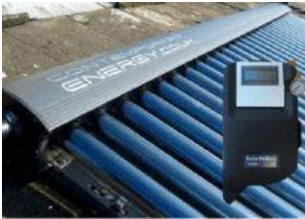
The Solar Kettle is light and compact. It weighs just 1Kg. It can be used to melt snow to make tea, coffee, soup and hot food which can seriously revive a cold and tired mountaineer. Alpine conditions of clear sunshine gives ideal operating conditions regardless of the air temperature.

Survival

The Solar Kettle can be used to sterilize water thus making unknown water sources safe to drink. Beverages such as tea, coffee, hot chocolate, soup can easily be made with the solar kettle.



Featured Products–Solar Thermal



Solar Thermal DIY Kits

We supply 30 tube and 18 tube solar thermal DIY kits with pumpstation and digital controller.

An optional twin-coil solar cylinder can be supplied at a discount.

Swimming Pool Solar Thermal Kits

Suitable for fulfilling the water heating needs of an average sized garden swimming pool.

This kit includes two 30 tube solar collectors, pumpstation, standard digital controller and heat exchanger.



Unvented Twin Coil Solar Cylinders

Duplex Stainless steel, unvented (mains pressure) twin coil solar cylinders.

Vented Twin Coil Solar Cylinders

Copper, vented twin coil solar cylinder (for use with header tank).



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The Amazing Solar Kettle

Our solar kettle is extremely portable, very stylish and holds 500ml of water, enough for three cuppas. In use, its reflectors are folded out to gather three times more energy than with only a plain tube. During transit the reflectors are folded in to protect the tube and assist with its portability. The solar kettle looks and feels just like a large Thermos™ flask. - See more at: <http://contemporaryenergy.co.uk/>



Visit our YouTube Video Demonstration

<http://www.youtube.com/watch?v=GW5Dzm4qK7c#t=14>

Solar Thermal Panel – Details



An important feature that distinguishes our manifolds from those of some of our competitors is the quality of the materials and the finish.

All our high quality manifolds carry our company name,
Contemporary Energy


Similarly, all our solar thermal tubes are embossed with our company name.

This is your assurance of the quality of our materials.



Manifold and frame make a very close fit to the roof tiles.

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Close-up showing where the solar thermal tubes fit into the manifold.



The solar thermal tubes are fitted into the manifold very easily.

A 30 tube solar thermal panel fully assembled. This side profile clearly shows how snugly the whole assembly fits the roof.

Note also the roof flashing where the pipe penetrates the roof..





For fitting a solar thermal panel to a flat roof we can supply an A-frame kit specially designed to be used with our panels.

Two panels may be fitted one above the other



..... or side-by-side. Through connection of the panels is quite straightforward either way.

Solar Thermal Panels can enhance a property

These three solar thermal panels look entirely in keeping on the roof of this amazing, rural property.



This solar thermal panel blends in very well in this lovely riverside property.

This solar thermal panel does not detract in any way from this beautiful old property.



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