

ENVIROSUN TS SYSTEM



 **envirosun**
advanced solar hot water solutions



ENVIROSUN SMARTER SOLAR SOLUTIONS

Everyone knows the benefits of solar hot water – by harnessing the sun's energy and converting it into hot water, it reduces your household's greenhouse gas emissions, saves you money on energy bills and adds value to your home.

Envirosun takes these benefits one step further, with a real commitment to the environment, and to you.

The Envirosun story is one that encompasses over a quarter of a century of industry experience and innovation. Supplying solar hot water systems is all we do, and we do it well. Our manufacturing philosophy is different. We're assemblers, not fabricators shackled by a commitment to an outdated manufacturing plant.

What we do is scour the world for the very best solar water heating components – tanks, collectors and controls - from some of the world's largest and most advanced production houses, allowing us to keep one step ahead as technology progresses. Through our process of choosing the best components that work and fit together in the best way, we are always at the cutting edge of the industry, providing superior, environmentally responsible solar hot water systems.

What this means for you is a product that is more reliable and more durable; one that works better and is more economical to run.



THE THERMOSIPHON SYSTEM (TS)

Benefits of the TS system.

01. Tank and panels roof mounted as one seamless unit
02. Maximum efficiency, minimal energy requirements
03. State-of-the-art protection systems
04. Superior durability, reliability and affordability
05. Cost effective, economical water heating

Envirosun's Thermosiphon System (TS) is one of the most advanced hot water systems available, offering maximum efficiency and a cost effective solution for most applications.

The hot water storage tank and the solar collector panels are roof-mounted as one seamless unit. Water is heated in the flat plate solar collector, and the smart thermosiphon design uses natural convection to move it through the system into an insulated storage tank located above the collector, minimising energy requirements. This design outperforms other types of systems and offers a superior level of efficient, economical water heating.

The clever design and engineering of the Envirosun Thermosiphon System utilises the strongest materials and state-of-the-art tank protection systems to ensure a long operating life in any environment, from freezing temperatures to extreme heat. The latest cutting edge technology and the cumulative advancements of Envirosun's 25 years industry experience combine to offer the ultimate in durability, reliability and affordability.

NATURAL CIRCULATION

TS tanks sit on the roof immediately above and butted against the solar collectors. This reduces the amount of pipework between the tanks and collectors and keeps heat loss down. It also means that as water is heated in the solar collectors, it can naturally readily rise into the cooler storage tank above. The hot water from the collectors flows into the middle of the storage tank and displaces cooler water in the bottom of the tank.

Provided the collectors are hotter than the water at the base of the tank, the circulation will continue. When the collector temperature falls to equal or lower than that of the tank water, circulation will stop - automatically.

The whole process occurs without the need for any external power to operate pumps or valves – and the flow rate between the tanks and collectors is naturally optimised.



COMPLIANCE AND STC CREDITS

Envirosun is fully compliant to all relevant industry standards, and independently accredited by the Australian Government Clean Energy Regulator (CER). Envirosun solar hot water systems appear on the CER Register and create Renewable Energy Certificates, which form the basis for determining Small-scale Technology Certificates (STCs). These credits are available as financial support to purchasers – the greater the number of STCs, the greater the level of support.

EXPLANATION:

The Australian Government Clean Energy Regulator publishes a Register of solar water heaters for which Small-scale Technology Certificates (STCs) may be created under the provisions of the Renewable Energy (Electricity) Act 2000. The number of STCs a particular water heater is entitled to create will depend on its installation date and geographic location. The Regulator has determined four zones for solar water heaters with each zone based on climate and solar radiation levels. Each zone has been defined based on geographic location.

The number of STCs depends on the installation date and geographic location of the solar hot water heater. The map below shows the geographic location for each zone. The CER also provides the list of postcodes that lie in each zone.



TS FACT SHEET

FOR FURTHER INFORMATION IN AUSTRALIA TELEPHONE:

For service, installation or warranty: 1300 825 143

For sales or product information: 1300 314 173

Head Office: Envirosun, 460 Victoria Road, Malaga WA 6090

TS (ELECTRIC BOOST)	TS300/6E	TS300/5E	TS300/4E
CER Code	TS300/60/O/E24/S/E20BC	TS300/50/O/E24/S/E25BC	TS300/40/O/E24/S/E20BC
Tank	TS300/O/E24/S	TS300/O/E24/S	TS300/O/E24/S
Collectors	E20BC	E25BC	E20BC
Storage capacity	300L	300L	300L
Mass empty	176kg	159kg	146kg
Mass full	478kg	460kg	446kg
Footprint	3,260 x 2,600mm	2,645 x 2,600mm	2,238 x 2,600mm
Boost capacity	140L	140L	140L
TANK			
Model	TS300/O/E24/S	TS300/O/E24/S	TS300/O/E24/S
Mass empty	87kg	87kg	87kg
Mass full	384kg	384kg	384kg
Footprint	650 x 2,150mm	650 x 2,150mm	650 x 2,150mm
Height	600mm	600mm	600mm
COLLECTORS			
Quantity	3	2	2
Model	E20BC	E25BC	E20BC
Mass empty (each)	29.5kg	36.0kg	29.5kg
Mass full (each)	31.2kg	38.0kg	31.2kg
Footprint (each)	1,000 x 2,000mm	1,235 x 2,000mm	1,000 x 2,000mm
Height (each)	80mm	80mm	80mm
ELECTRIC BOOSTER			
Rating	2.4kW	2.4kW	2.4kW
SMALL-SCALE TECHNOLOGY CREDITS (STCs)			
Zone 1	40	40	30
Zone 2	40	42	32
Zone 3	39	38	29
Zone 4	34	33	25

TS (GAS BOOST)	TS300/6G	TS300/5G	TS300/4G
CER Code	TS300/60/O/GR26/S/E20BC	TS300/50/O/GR26/S/E25BC	TS300/40/O/GR26/S/E20BC
Tank	TS300/O/E24/S	TS300/O/E24/S	TS300/O/E24/S
Collectors	E20BC	E25BC	E20BC
Storage capacity	300L	300L	300L
Mass empty (exc Booster)	176kg	159kg	146kg
Mass full (exc Booster)	478kg	460kg	446kg
Footprint	3,260 x 2,600mm	2,645 x 2,600mm	2,238 x 2,600mm
Boost rate	24L/m	24L/m	24L/m
TANK			
Model	TS300/O/E24/S	TS300/O/E24/S	TS300/O/E24/S
Mass empty	87kg	87kg	87kg
Mass full	384kg	384kg	384kg
Footprint	650 x 2,150mm	650 x 2,150mm	650 x 2,150mm
Height	600mm	600mm	600mm
COLLECTORS			
Quantity	3	2	2
Model	E20BC	E25BC	E20BC
Mass empty (each)	29.5kg	36.0kg	29.5kg
Mass full (each)	31.2kg	38.0kg	31.2kg
Footprint (each)	1,000 x 2,000mm	1,235 x 2,000mm	1,000 x 2,000mm
Height (each)	80mm	80mm	80mm
GAS BOOSTER			
Rating	40kW	40kW	40kW
SMALL-SCALE TECHNOLOGY CREDITS (STCs)			
Zone 1	41	40	42
Zone 2	43	43	43
Zone 3	42	41	42
Zone 4	37	35	37

*STCs are subject to change. Consult www.cleanenergyregulator.gov.au for updates.



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