

ENVIROSUN AS SYSTEM





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 We’re assemblers, not fabricators shackled by a commitment to an outdated manufacturing plant.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 ACTIVE SOLAR SYSTEM (AS)

Benefits of the AS system.

01. High performance active solar hot water system
02. Roof-installed solar collectors and ground-mounted tank
03. Tank can be located indoors or out
04. Greater flexibility, improved aesthetics and higher capacity
05. Latest collector technology
06. Maximum solar absorption and storage in all areas

Envirosun's Active Solar 'AS' range of pumped or active solar hot water systems offer greater flexibility, improved aesthetics and higher capacity, along with maximum efficiency and reduced energy costs. Only the solar collectors are installed on the roof, harnessing energy from the sun and transferring it to a ground-mounted storage tank. The tank can be sited indoors or out, in any convenient or out-of-the-way location.

The operating principle is simple - when the solar collectors are able to add heat into the storage tank, a small pump is switched on to circulate hot water from the collectors and replace it with cool water from the tank. Once the tank is full of hot water, the pump is switched off, but ready for the next cycle.

While pumped systems have been around for many years, modern electronics and materials have brought improvements in both function and reliability. Today's EnviroSun AS systems adopt many of these technological advances and blend them with our collector technology to create a range of high-performance active solar hot water systems that maximise solar absorption and storage, whether you live in a low or high radiation area.

THE CONTROLLER

The AS System circulating pump is controlled by an electronic microprocessor that is located on the side of the storage tank and adjacent to the pump. The controller uses two temperature sensors to compare the temperature of the solar collectors to that of the storage tank.

When the collectors are 6°C hotter than the tank, the controller starts the pump and water begins to circulate between the tank and collectors. Circulation continues until the temperature difference between the tank and collectors falls to 4°C and the pump is then stopped.

The circulating pump draws negligible electrical energy and the controller ensures it operates when solar gain is available.

The controller also fulfils a number of other functions: it protects the storage tank from over-heating, it cools the collectors if they approach excessively high temperatures; and it reduces the risk of the collectors freezing under winter frost conditions*.



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 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.



*Not recommended for severe frost-prone areas.

AS 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

AS (ELECTRIC BOOST)	AS315/6E	AS315/5E	AS315/4E	AS400/6E	AS400/5E
CER Code	AS315/60/O/E24/E20BC-DM	AS315/50/O/E24/E25BC-DM	AS315/40/O/E24/E20BC-DM	AS400/60/O/E24/E20BC-DM	AS400/50/O/E24/E25BC-DM
Tank	VE315/E24/V-DM	VE315/E24/V-DM	VE315/E24/V-DM	VE400/E24/V-DM	VE400/E24/V-DM
Collectors	E20BC	E25BC	E20BC	E20BC	E25BC
Storage capacity	334L	334L	334L	425L	425L
Mass empty	194kg	177kg	164kg	205kg	188kg
Mass full (on roof)	94kg	78kg	62kg	94kg	78kg
Mass full (on ground)	439kg	439kg	439kg	541kg	541kg
Footprint (on roof)	3,260 x 2,600mm	2,645 x 2,600mm	2,238 x 2,600mm	3,260 x 2,600mm	2,645 x 2,600mm
Footprint (on ground)	617 x 617mm	617 x 617mm	617 x 617mm	705 x 705mm	705 x 705mm
Boost capacity	187L	187L	187L	253L	253L
TANK					
Model	VE315/E24/V-DM	VE315/E24/V-DM	VE315/E24/V-DM	VE400/E24/V-DM	VE400/E24/V-DM
Mass empty	105kg	105kg	105kg	116kg	116kg
Mass full	439kg	439kg	439kg	541kg	541kg
Footprint	617 x 617mm	617 x 617mm	617 x 617mm	705 x 705mm	705 x 705mm
Height	1,754mm	1,754mm	1,754mm	1,703mm	1,703mm
COLLECTORS					
Quantity	3	2	2	3	2
Model	E20BC	E25BC	E20BC	E20BC	E25BC
Mass empty (each)	29.5kg	36.0kg	29.5kg	29.5kg	36.0kg
Mass full (each)	31.2kg	38.0kg	31.2kg	31.2kg	38.0kg
Footprint (each)	1,000 x 2,000mm	1,235 x 2,000mm	1,000 x 2,000mm	1,000 x 2,000mm	1,235 x 2,000mm
Height (each)	80mm	80mm	80mm	80mm	80mm
ELECTRIC BOOSTER					
Rating	2.4kW	2.4kW	2.4kW	2.4kW	2.4kW
SMALL-SCALE TECHNOLOGY CREDITS (STCs)					
Zone 1	40	40	29	40	40
Zone 2	43	43	31	43	43
Zone 3	40	39	29	40	39
Zone 4	35	35	25	35	34

AS (GAS BOOST)	AS315/6G	AS315/5G	AS315/4G	AS400/6G	AS400/5G
CER Code	AS315/60/O/GR26/E20BC-DM	AS315/50/O/GR26/E25BC-DM	AS315/40/O/GR26/E20BC-DM	AS400/60/O/GR26/E20BC-DM	AS400/50/O/GR26/E25BC-DM
Tank	VE315/E24/V-DM	VE315/E24/V-DM	VE315/E24/V-DM	VE400/E24/V-DM	VE400/E24/V-DM
Collectors	E20BC	E25BC	E20BC	E20BC	E25BC
Storage capacity	334L	334L	334L	425L	425L
Mass empty	194kg	177kg	164kg	205kg	188kg
Mass full (on roof, exc Booster)	94kg	78kg	62kg	94kg	78kg
Mass full (on ground, exc Booster)	439kg	439kg	439kg	541kg	541kg
Footprint (on roof)	3,260 x 2,600mm	2,645 x 2,600mm	2,238 x 2,600mm	3,260 x 2,600mm	2,645 x 2,600mm
Footprint (on ground)	617 x 617mm	617 x 617mm	617 x 617mm	705 x 705mm	705 x 705mm
Boost rate	24L/m	24L/m	24L/m	24L/m	24L/m
TANK					
Model	VE315/E24/V-DM	VE315/E24/V-DM	VE315/E24/V-DM	VE400/E24/V-DM	VE400/E24/V-DM
Mass empty	105kg	105kg	105kg	116kg	116kg
Mass full	439kg	439kg	439kg	541kg	541kg
Footprint	617 x 617mm	617 x 617mm	617 x 617mm	705 x 705mm	705 x 705mm
Height	1,754mm	1,754mm	1,754mm	1,703mm	1,703mm
COLLECTORS					
Quantity	3	2	2	3	2
Model	E20BC	E25BC	E20BC	E20BC	E25BC
Mass empty (each)	29.5kg	36.0kg	29.5kg	29.5kg	36.0kg
Mass full (each)	31.2kg	38.0kg	31.2kg	31.2kg	38.0kg
Footprint (each)	1,000 x 2,000mm	1,235 x 2,000mm	1,000 x 2,000mm	1,000 x 2,000mm	1,235 x 2,000mm
Height (each)	80mm	80mm	80mm	80mm	80mm
GAS BOOSTER					
Rating	40kW	40kW	40kW	40kW	40kW
SMALL-SCALE TECHNOLOGY CREDITS (STCs)					
Zone 1	37	37	25	37	37
Zone 2	41	41	28	41	40
Zone 3	38	38	26	38	37
Zone 4	33	33	23	33	32

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



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