

Thermosiphon L Series

Description

The Solahart L Series is a roof mounted, open circuit solar water heater specifically designed to provide economical service in medium to high solar gain areas.

The L Series is ingenious in its simplicity. The black polyester powder coated aluminium absorber collects the sun's heat and transfers it to the water in the risers. Copper is used for the risers for its high thermal conductivity ensuring the maximum amount of heat energy is passed to the water. As the water in the risers is heated, it rises into the tank to be replaced by cooler water from the tank. The solar heated water is then stored ready for use - hot water free from the sun.



The L Series has a double coated ceramic lined tank with a protective sacrificial anode. The L Free Heat features additional anode protection.

L and L Free Heat systems can be installed with an optional TRV over temperature protection system to prevent over performance during periods of higher solar radiation and lower hot water draw off.

Key Features

- Stylish slimline design
- Thermosiphon operation minimises maintenance
- Gas or electric booster models available
- Double coated ceramic lined tank
- Enhanced protection on Free Heat model
- TRV over temperature protection available
- Free Heat series available in 180 and 300 litre capacities

Key Benefits

- Can save up to 50% to 85% of water heating energy consumption*
- Reliable, low maintenance operation
- Hot water regardless of the weather
- Qualifies for valuable environmental incentives*
- Reduced energy use can save up to 1.7 to 2.8 tonnes of CO₂ emissions per annum*
- Peace of mind with 10/5/5 (L Free Heat) and 5/5/5 (L Series) year warranties[†]

^{*} Energy savings of up to 50% to 85% shown are based on Australian Government approved TRNSYS simulation modelling using a medium load. Savings and incentives will vary depending upon your location, type of Solahart system installed, orientation and inclination of the solar collectors, type of water heater being replaced, hot water consumption and fuel tariff. Maximum financial savings off your hot water bill are achievable when replacing an electric water heater on continuous tariff. Refer to solahart.com.au for further information.

[†] Solahart Warranty Details: 10/5/5 warranty, 10 year cylinder and collectors supply, 5 year parts, 5 year labour; 5/5/5 warranty; 5 year cylinder and collectors supply, 5 year parts, 5 year labour.

Thermosiphon L and L Free Heat Open Circuit Systems

These systems are suitable for multiple installations. They are not suitable for frost or harsh water regions.

L and L Free Heat Systems						
Model		180 tank	181 system	300 tank	302 system	303 system
Tank model						
L		180L	✓	300L	✓	✓
L Free Heat		180LF	✓	300LF	✓	✓
Collector model			L		L	L
No of collectors			1		2	3
Storage capacity	litres	180	180	300	300	300
	US gal	48	48	80	80	80
Boost capacity	litres	90	90	150	150	150
(electric)	US gal	24	24	40	40	40
Weight empty	kg	62	97	91	156	188
	lbs	137	214	201	344	419
Weight full	kg	242	279	391	460	493
	lbs	553	615	862	1015	1087
A – Width*	m	1.62	1.67	2.43	2.48	3.37
	in	63.8	66.8	95.7	97.6	132.7
B – Length*	m	0.51	2.53	0.51	2.53	2.53
	in	20.1	99.6	20.1	99.6	99.6

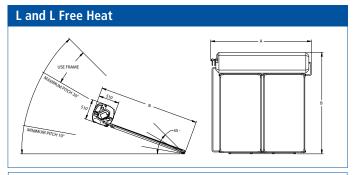
^{*} An Additional 0.9m (35.4in) should be left on all four sides of the installation for safe access and servicing.

The L and L Free Heat systems (if installed with a TRV system) can be installed as a solar preheater with a Solahart inline gas booster water heater.

Refer to the Solahart gas booster specification sheet for further details on the gas booster.

L Collector				
Aperture (heating) area	m²	1.87	ft²	20
Dimensions length	mm	1937	in	76.3
width	mm	1022	in	40.3
height	mm	77	in	3.0
Capacity	litres	3	US gal	0.8
Weight* empty	kg	32	lbs	71
full	kg	34	lbs	75
Working pressure	kPa	1000	psi	145
Absorber surface		Black polyester powder coat		
Absorber material		Aluminium		
Riser material		Copper tube		
Tray material		0.7 mm aluminium		
Insulation material - base		38 mm polyester blanket		
Glass		3.2 mm tempered low iron		

^{*}Weight includes fittings.



Energy Tip: When installing your solar water heater, install minimum 3 star rated shower roses and flow restrictors to your taps if you don't already have them. This will not only save water but make your solar savings go further.

Electric Boost Specifications					
Heating unit	type	Copper sheath immersion element			
Supply voltage	ge	220 V — 250 V			
Recovery rate (litres/hour) @ 240 V and temperature rise of:					
Rating kW	Current Amps	30°C litres/hour	40°C litres/hour	50°C litres/hour	
1.8	8	51	39	31	
2.4	10	68	52	41	
3.6	15	103	77	62	

Water Supply					
TPR valve setting	kPa	1000	psi	145	
ECV* setting	kPa	850	psi	125	
Max. supply pressure					
with ECV	kPa	680	psi	100	
without ECV	kPa	800	psi	115	
Water Connections	cold	Rp 3/4			
	hot		R 1/2		

^{*}Expansion Control Valve. Technical data is subject to change.



[^]Harsh water regions - the Solahart warranty may not apply if the water heater is connected to a water supply which: is scaling with a Saturation Index >+0.8, or; is corrosive with a Saturation Index <-1.0, or; has a Total Dissolved Solid content >2500mg/L.