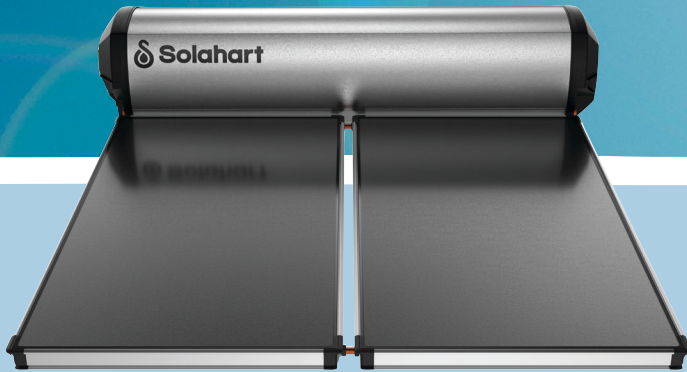


Thermosiphon

CS/SP SERIES

Roof-mounted, closed-circuit systems with revolutionary Envelope solar collectors



The Solahart CS and SP Series, featuring Australian designed Envelope solar collectors, offer the very latest in styling and all-weather durability.

The CS Series provides higher collector performance in low to medium solar gain areas while the SP Series provides efficient performance in medium to high solar gain areas. The collectors, with five patents pending, have been designed to meet or exceed Australian and International Standards in areas of strength, performance and durability.

The ceramic lined tank has a protective sacrificial anode to improve the life of the tank and Free Heat models feature a larger anode for greater peace of mind.

Features

- **CS SERIES** - High Performance Blue Sputtered selective surface collector, for use in **low to medium** solar gain areas
- **SP SERIES** - Efficient black polyester powder coated collector, for **medium to high** solar gain areas
- Ceramic lined tank with sacrificial anode
- Silicon adhesive used for glass and frame attachment
- Closed circuit operation
- HartStat Over Temperature Protection (OTP) standard inclusion CS series (in Australia), optional extra SP series
- Thermosiphon technology requires no mechanical pump
- 5 year comprehensive parts and labour warranty plus Free Heat 10 year warranty 300 litre models †
- Electric and gas boosted models available

Benefits

- Can save up to 50% to 90%* of water heating energy consumption
- Reduced energy use can save up to 1.5 to 3.2 tonnes of CO₂ emissions per annum*
- Enhanced tank protection
- Collector design withstands extreme weather conditions
- Suitable for frost prone or harsh water quality areas
- Protects from over performance on hot days and when there is low water usage
- Reliable, low maintenance operation for years of worry free hot water
- Trusted Solahart warranties
- Hot water regardless of the weather

*Energy savings of up to 50% to 90% 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 more information. †Solahart Warranty Details: 10/5/5 warranty, 10 year cylinder and collector supply, 5 year parts, 5 year labour; 5/5/5 warranty, 5 year cylinder and collector supply, 5 year parts, 5 year labour; applies only when installed as a complete new system.

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These systems are suitable for multiple installations. They are suitable for frost and harsh water regions.

Thermosiphon CS and SP Closed Circuit Systems

System Model Collector	CSA2013	181CS13C 1	302CS13C 2	303CS13C 3
System Model Collector	SPA2000	181SP 1	302SP 2	303SP 3
Tank Model	CS/SP CS/SP Free Heat	180J -	300J 300F	300J 300F
HartStat OTP [^]		✓	✓ ‡	✓ ‡
Storage Capacity	litres US gal	180 48	300 80	
Boost Capacity	litres US gal	90 24	150 40	
Weight Empty Tank Only	kg lbs	75 163	110 243	
Weight Full Tank Only	kg lbs	254 560	410 904	
A – Width* Tank Only	m in	1.62 63.8	2.43 95.7	
Weight Empty System	kg lbs	131 289	216 477	268 591
Weight Full System	kg lbs	324 714	535 1180	591 1303
A – Width* System	m in	1.62 63.8	2.43 95.7	3.38 133.1

*For safe access and servicing, a space equal to the tank length should be left on the water connection end of the system and 1m (40in) should be left on the three other sides of the installation. ‡HartStat OTP is mandatory on these models in Australia and New Zealand. Systems (if installed with a HartStat OTP system) can be installed as a solar preheater with an inline Solahart gas booster water heater. Refer to the Solahart gas booster specification sheet for further details on the gas booster. ^HartStat OTP is supplied as standard on SC systems in Australia and is available as an option on SP systems.

Collectors - CSA2013 & SPA2000

Aperture area	m ²	1.88	ft ²	20.2	
Dimensions	length	mm	1996	in	78.6
	width	mm	1043	in	41.1
	height	mm	82	in	3.2
Working pressure	no OTP	kPa	80	psi	12
	with OTP	kPa	170	psi	24
		CSA2013	SPA2000		
Capacity	litres	1.9		3.8	
	US gal	0.5		1	
Weight - empty	kg	37		45	
	lbs	82		99	
Weight - full	kg	39		49	
	lbs	86		108	
Absorber surface	Tinox sputtered selective surface		black polyester powdercoat		
Absorber / Riser material	copper		steel		
Number of risers	13		35		
Insulation blanket material (base)	38mm glass wool		38mm polyester		
Frame material	extruded aluminium				
Glass	3.2mm tempered low iron				

Water Supply

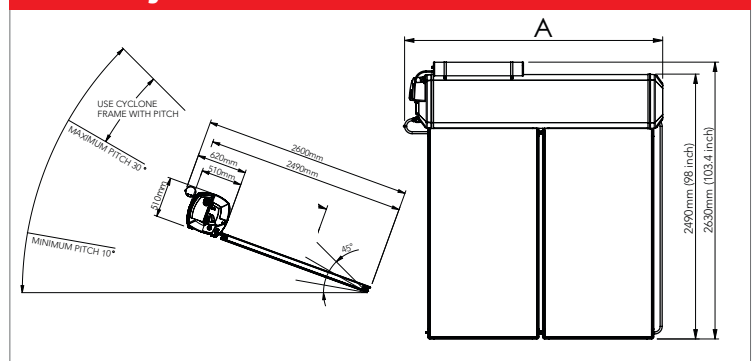
TPR valve setting	kPa	1000	psi	145
ECV* setting	kPa	850	psi	125
Max. supply pressure	kPa	680	psi	100
	with ECV	kPa	800	psi
Water Connections	cold hot	Rp 3/4 R 1/2		

*Expansion Control Valve.

Technical data is subject to change.

Solahart Australia Tel: 1300 769 475 • www.solahart.com.au
 Solahart International Tel: +61 8 9351 4600 • www.solahart.com
 Re-order code: SHB/SHW-SP/CS SOLA0352 - Dec 2016

CS/SP Systems



Electric Boost Specifications

Heating unit type*	Copper sheath immersion element			
Supply voltage	220 V – 250 V			
Recovery rate @ 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
2.5*	10.5	71	54	43
3.6	15	103	77	62

*A bobbin element (2.5 kW) is available for hard or corrosive water areas.

