



# SunEarth

## THE SOLARSTATION XXL

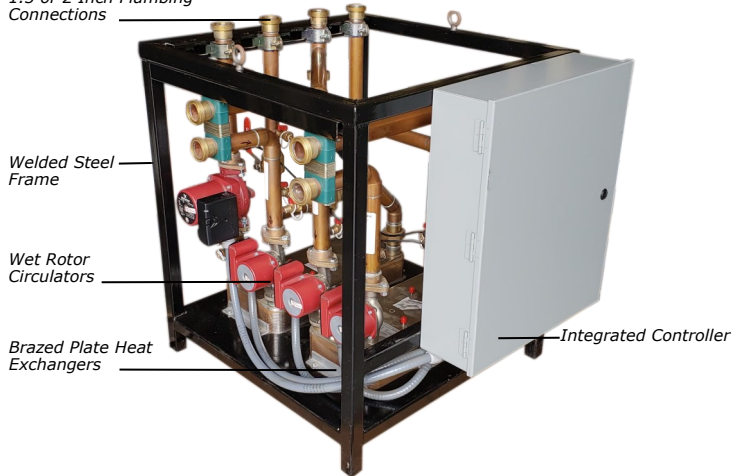
### SOLAR PUMP STATION SPECIFICATION SHEET

## Applications



Solar Water Heating

1.5 or 2 Inch Plumbing Connections



Welded Steel Frame

Wet Rotor Circulators

Brazed Plate Heat Exchangers

Integrated Controller

## Technical Specifications

Model	10005-7-1000	10005-7-2000	10005-7-3000
Collector Area	1000 ft <sup>2</sup>	2000 ft <sup>2</sup>	3000 ft <sup>2</sup>
Connection Size	1.5 in.	2 in.	2 in.
Input Voltage	110 VAC	110 VAC	110 VAC
Max Pump Power	500 W	500 W	500 W
Heat Exchanger Area	33 ft <sup>2</sup>	68 ft <sup>2</sup>	104 ft <sup>2</sup>
Heat Exchanger Rating	1330 kbtu/hr	2660 kbtu/hr	3990 kbtu/hr

## Materials

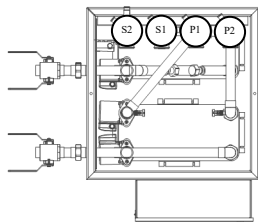
SolarStation Frame  
Heat Exchanger:  
Plumbing:  
Potable Pump:  
Solar Pump:

Welded Steel  
316 Stainless Steel Plates  
Type M Copper Pipe  
Stainless Wetting Surfaces  
Cast Iron Wetting Surfaces

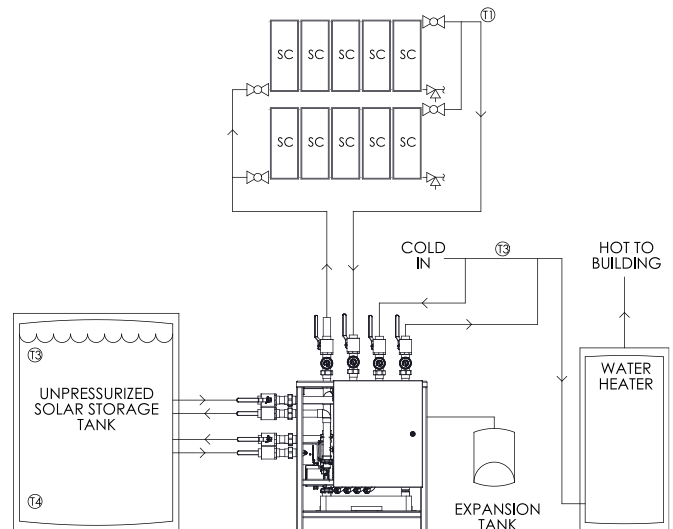
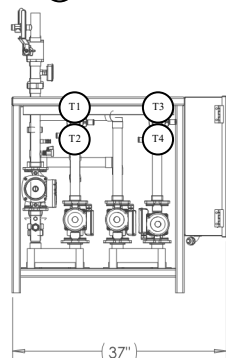
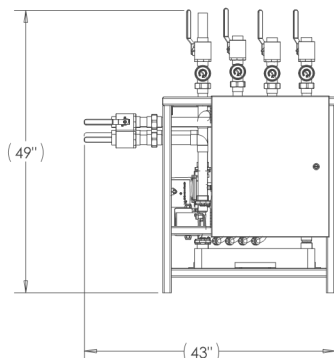
## Available Models

- 100005-7-1000, 1000 ft<sup>2</sup> collector area, Unpressurized Storage
- 100005-7-2000, 2000 ft<sup>2</sup> collector area, Unpressurized Storage
- 100005-7-3000, 3000 ft<sup>2</sup> collector area, Unpressurized Storage
- 100005-7-1000-1, 1000 ft<sup>2</sup> collector area, Pressurized Storage
- 100005-7-2000-1, 2000 ft<sup>2</sup> collector area, Pressurized Storage
- 100005-7-3000-1, 3000 ft<sup>2</sup> collector area, Pressurized Storage

## Technical Information



- S2 SOLAR OUT
- S1 SOLAR IN
- P2 POTABLE INJECTION OUT
- P1 POTABLE INJECTION IN
- T1 STORAGE TANK IN
- T2 STORAGE TANK OUT
- T3 STORAGE TANK OUT
- T4 STORAGE TANK IN



## Example Diagram

Due to SunEarth's policy of continuous product improvement, specifications are subject to change without notice.



# SunEarth

8425 Almeria Avenue Fontana, CA 92335  
(909) 434-3100  
[www.sunearthinc.com](http://www.sunearthinc.com)

Rev C, DECEMBER 2022



### Features and Components

Decrease installation time, reduce labor costs and engineering costs with the SolarStation XXL, SunEarth's solution to large scale commercial solar thermal. Designed with multi speed pumps to ensure compatibility with a wide range of system configurations. The SolarStation XXL is factory assembled using top tier components and is tested for hydraulic integrity to ensure a smooth installation every time.

#### Controller

Operates the pumps through differential temperature algorithms, the Liquid Crystal Display (LCD) offers insight into the system operation and condition. The controller reports temperature readings from up to 5 locations with 3 controllable outputs. Includes micro-SD card for data logging of Time, date, temperature, flow-rate, pressure and energy measurements. Customizable options are able to meet the monitoring needs of many commercial buildings.

#### Electronic Flow Meter, Pressure and Temperature Sensors

Enables solar system energy production monitoring and accurate solar system control. Ensuring faster system commissioning with the ability to precisely adjust system parameters.

#### Heat Exchanger

Brazed Plate Heat Exchanger manufactured from corrosion resistant 316L Stainless Steel. Channel design promotes turbulent flow for superior heat transfer through a range of flow rates. Aluminum bracket to ensure heat exchangers are fixed to steel framing. Dual heat exchanger models offer double protection against leaks into potable system.

#### Pumps

Wet-rotor type whereas the pump and motor form an integral unit without shaft seals. Solar and Potable pump utilize composite impellers with cast-iron and stainless steel volutes respectively. Integrated check valves, where applicable prevent unwanted heat migration and multiple speed settings provide the ability to tune the solar system for optimal operation rates.. Customizable options to meet site specific requirements.

#### Plumbing Strainers

Allowing for trouble-free flushing of Solar and potable circuits. Extends system life and reduces service calls by safely collecting any scale or installation debris.

#### Isolation Valves

Allowing for trouble-free flushing of Solar and potable circuits. Extends system life and reduces service calls by safely collecting any scale or installation debris.

#### Solar Pump Station Specifications

The solar pump station shall be SunEarth Model \_\_\_\_\_. The unit pumps shall be controlled via differential temperature controller, utilizing included resistance temperature sensor inputs. There shall be isolation/service drain valves on both the suction and discharge sides of each pump. The heat exchanger solar and potable return ports shall have isolation drain valve unions to allow servicing of the system. There shall be visual and electronic pressure gauges for both potable and solar plumbing circuits.

### CUSTOMIZABLE COMPONENT OPTIONS: IDENTIFY REQUIRED MODEL

PUMP OPTIONS		GRUNDFOS MODEL		
SOLAR CIRCUIT	UPS26-99FC	UPS26-150F	UPS43-100	UPS40-160F
STORAGE TRANSFER CIRCUIT 1	UPS15-55SFC	UPS26-99SF	UPS26-150SF	UPS32-80FB
STORAGE TRANSFER CIRCUIT 2	UPS15-55SFC	UPS26-99SF	UPS26-150SF	UPS32-80FB
POTABLE CIRCUIT	UPS15-55SFC	UPS26-99SF	UPS26-150SF	UPS32-80FB

CONTROL OPTIONS		SUNEARTH MODEL	
CONTROLLER	SETR A 503 TTR	SEPROX	SESF-3221
MONITORING	SEPRO DL2	RESOL DL3	