



# SUN EARTH

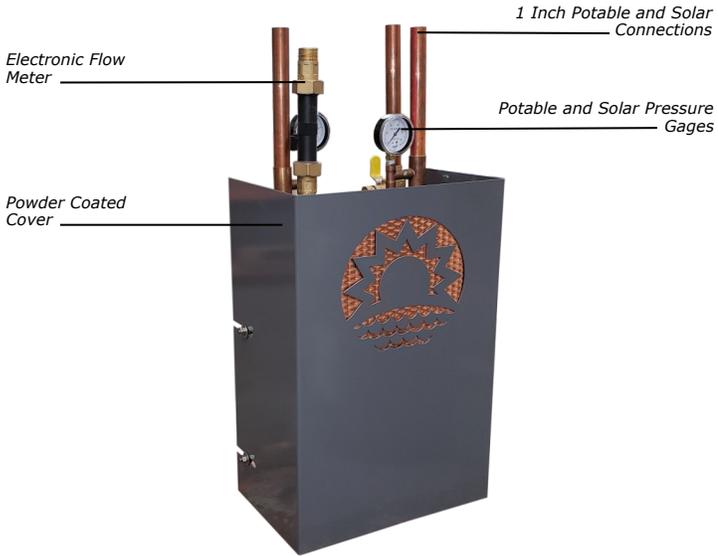
## THE SOLARSTATION XL

SOLAR PUMP STATION SPECIFICATION SHEET

### Applications



Solar Water Heating



### Technical Specifications

Model	100005-2	100005-5
Maximum Collector Area	480 ft <sup>2</sup>	720 ft <sup>2</sup>
Maximum Nominal Pipe Size	1.5 in.	2 in.
Maximum Solar Plumbing Run	~200 ft.	~200 ft.
Maximum Static Head	n/a	25 ft.
Input Voltage	110 VAC	110 VAC
Maximum Pump Power	400 W	400 W
Maximum Potable Run	~50 ft.	~50 ft.

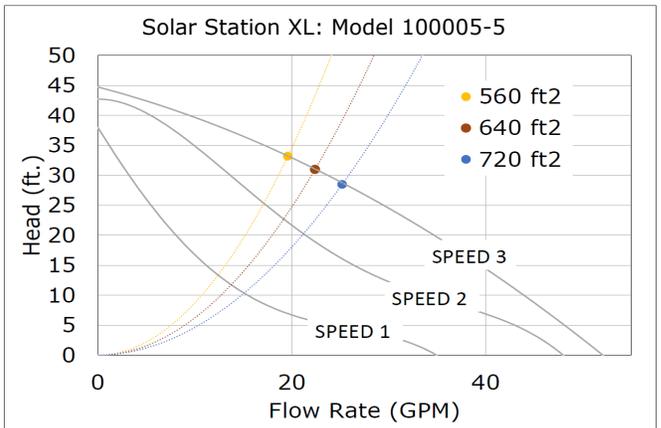
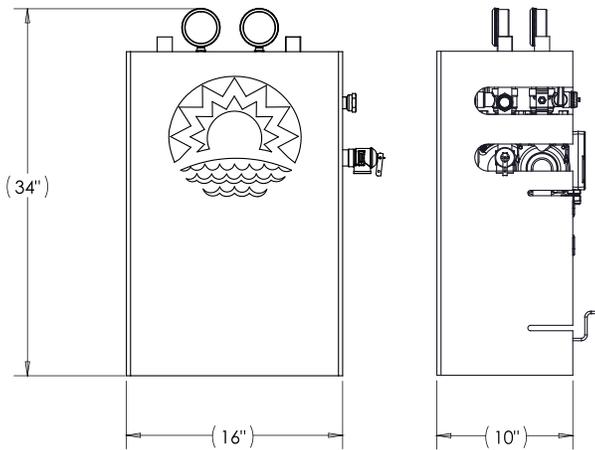
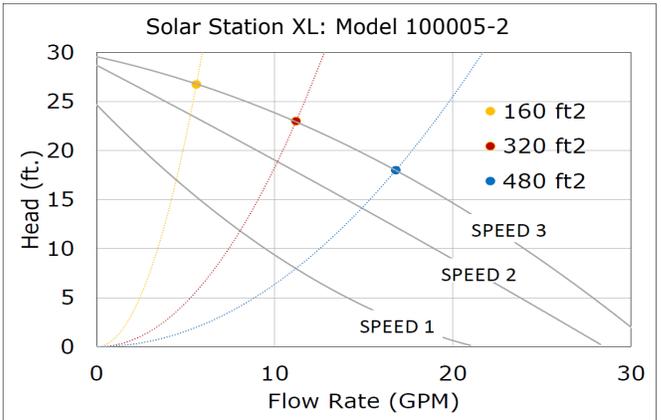
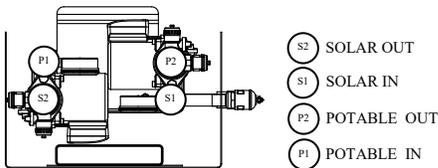
### Materials

Plumbing Cover: Powder Coated Aluminum  
 Heat Exchanger: 316 Stainless Steel Plates  
 Plumbing: Type M Copper Pipe  
 Potable Pump: Stainless Wetting Surfaces  
 Solar Pump: Cast Iron Wetting Surfaces

### Available Models

- 100005-2, 480 ft<sup>2</sup> collector area
  - 100005-5, 740 ft<sup>2</sup> collector area
- \*All models available with double wall heat exchanger\*

### Technical Information



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



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



### Features and Components

The SolarStation XL is SunEarth’s solution to commercial solar thermal systems up to 720 ft<sup>2</sup> of collector area. Designed with multi speed pumps to ensure compatibility with a wide range of system configurations. The SolarStation XL is factory assembled using top tier components and is tested for hydraulic integrity to ensure a smooth installation.

#### 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. Micro-SD card for data logging of Time, date, temperature, flow-rate, pressure and energy measurements are standard. Optional internet connectivity and system reporting through a web based application.

#### 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 for precise adjusts to 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 allows for attachment to wall mounted strut. Optional double wall heat exchanger available.

#### 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 prevent unwanted heat migration and multiple speed settings provide the ability to tune the solar system for optimal operation rates.

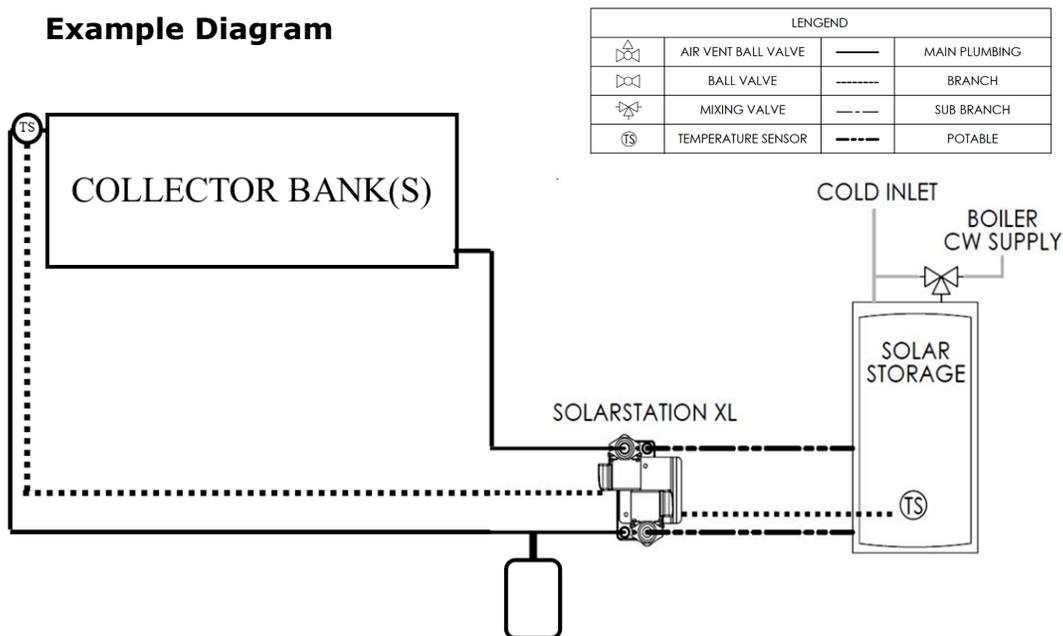
#### Service Valves

Ball drain valves eliminate dozens of leak paths, allowing for trouble-free flushing, draining and filling of Solar and potable circuits.

#### 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. The heat exchanger shall have a heat exchange area of no less than 9.34 square feet. The unit shall have a master service switch to disable the unit with a single throw. There shall be visual and electronic pressure gauges for both potable and solar plumbing circuits.

### Example Diagram



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