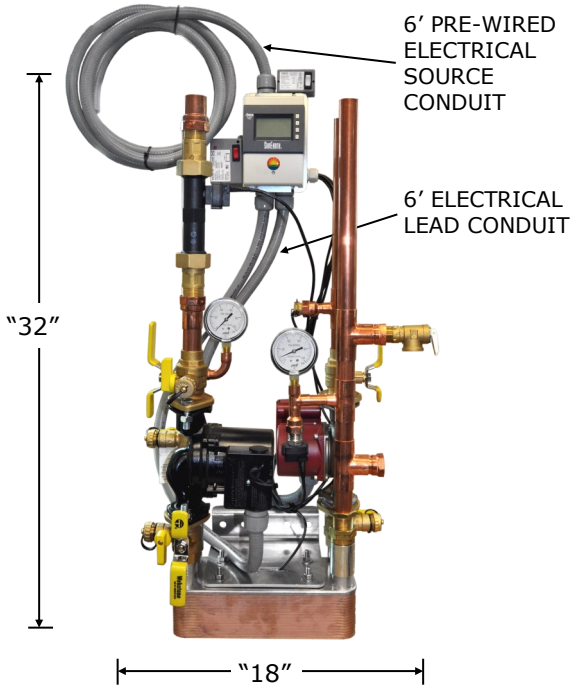
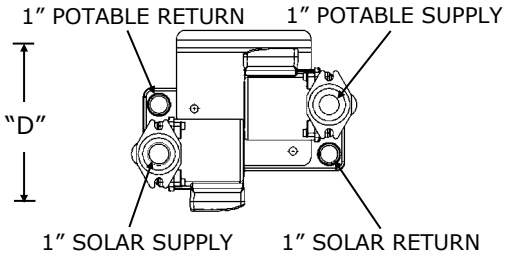
THE SolarStation XL

SOLAR PUMP STATION **SPECIFICATION SHEET**

Dimensions and Technical Specifications





System	
Max Collector Area Model 10005-2	480 ft^2
Max Collector Area Model 10005-5	740 ft^2
Model 10005-2 Dimensions HxWxD	32x18x12 inches
Model 10005-5 Dimensions HxWxD	32x18x16 inches
System Type	Indirect Glycol
Maximum Solar Pressure	100 PSIG
Maximum Potable Pressure	145 PSIG
Electrical	
Maximum Running Power Input	400 Watts
Input voltage	115 Volts
Maximum Running Amperage	5 Amps
Wire Size	14 AWG
Breaker Size	15 Amps
Non- Metallic Conduit	1/2 inch

Features and Components

The SolarStation XL is SunEarth’s solution to intermediate commercial solar thermal. 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 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.

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 allows for attachment to wall mounted strut.

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 completely disable the unit with a single throw. There shall be visual and electronic pressure gauges for both potable and solar plumbing circuits.

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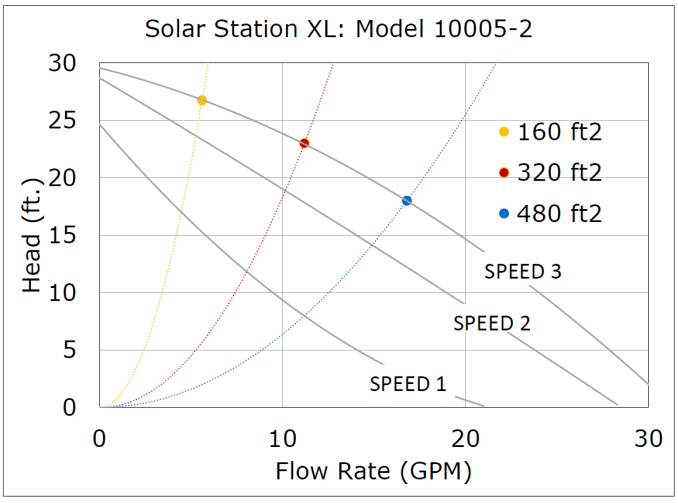
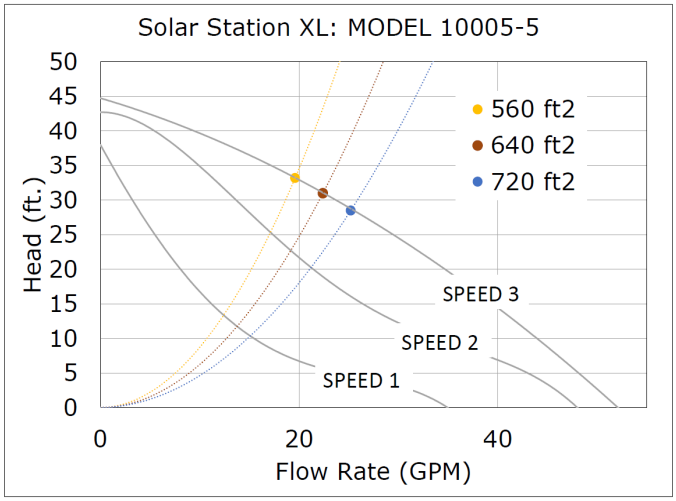
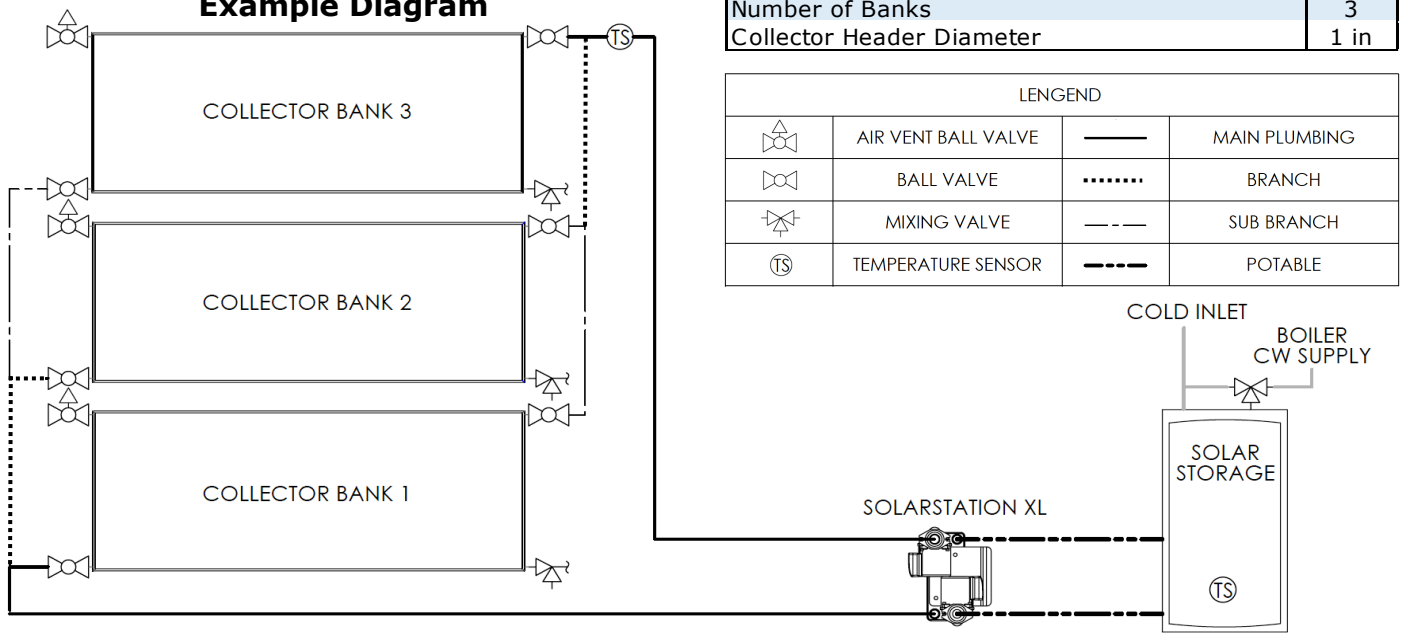




SolarStation XL Model 10005-2	
160 ft² Collector Array	
3/4" Main Loop Maximum	160 ft
3/4" Potable Loop Maximum	50 ft
Number of Banks	1
Collector Header Diameter	1 in
320 ft² Collector Array	
1" Main Loop Maximum	100 ft
3/4" Potable Loop	50 ft
Number of Banks	1
Collector Header Diameter	1 in
480 ft2 Collector Array	
1-1/2" Main Loop Maximum	100 ft
1-1/4" Branch Loop	30 ft
1" Potable Loop	30 ft
Number of Banks	2
Collector Header Diameter	1 in

SolarStation XL Model 10005-5	
560 ft2 Collector Array	
1-1/2" Main Loop Maximum	250 ft
1" Branch Loop	30 ft
1" Potable Loop	35 ft
Number of Banks	2
Collector Header Diameter	1 in
640 ft2 Collector Array	
1-1/2" Main Loop Maximum	100 ft
1" Branch Loop	30 ft
1-1/4" Potable Loop	45 ft
Number of Banks	2
Collector Header Diameter	1 in
720 ft2 Collector Array	
1.5" Main Loop Maximum	115 ft
1-1/4" Branch Loop	15 ft
1" Sub Branch Loop	30 ft
1-1/4" Potable Loop	35 ft
Number of Banks	3
Collector Header Diameter	1 in

Example Diagram



LENGEND			
	AIR VENT BALL VALVE		MAIN PLUMBING
	BALL VALVE		BRANCH
	MIXING VALVE		SUB BRANCH
TS	TEMPERATURE SENSOR		POTABLE

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

SUNEARTH

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