

SOLAR CONTROLLER SPECIFICATION SHEET

Applications



Line Cord Output Plug

74" Power Cord (3x18 AWG)

General:

The SunEarth[®] model **SETR 0301 U** differential temperature control provides for the automatic, safe, and reliable operation of domestic solar water heating systems. The control output is wired to a pump that circulates the heat transfer fluid between the solar thermal collectors and the storage tank during the course of the day.

This microprocessor-based control utilizes two RTD type sensors to monitor collector and tank temperatures with digital accuracy.

The LCD gives the system-owner a variety of real time information including system temperatures at up to three separate locations.

The consistent use of simple pictograms ensures ease of operation and troubleshooting.

Technical Specifications:

Model: SETR0301U	
Dimensions:	(H)6.18" x (W)6.3" x (D)1.85"
Operating Voltage:	120VAC/60HZ
Line Cord:	7′, 18 AWG Rated 221°F
Control Power Consumption:	≤ 1 Watt
Input-3 For Temperature Sensors, Varistor Protected:	PT1000-Probe
Output-1 For Circulating Pump, Fuse Protected:	Max Load At 120VAC Is 0.5 HP (Littelfuse 215.004)
Temperature Sensors 2 x PT1000-Probe (-40 to +356°F):	RTD Type 4.9' Silicone Cable With Probe
Graphic Display:	Animated LCD Display, 2 Color Background
Protection Class:	IP 20/Din 40050
Ambient Temperature Operating Range:	32°F –113°F
Installation:	Mounted With Screw
Weight:	1 lb. 5oz.
Case:	Recyclable 3-Piece Plastic
Warranty:	2 Years

Display Overview:



(12) Sufficient Solar Energy

- ⑤ Temp. Unit C°/F°
- 6 Tube Collector Function
- ⑦ Max. Storage Tank Temp.

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

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тне **SETR0301U**

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Dimensions:

ENGINEERING SPECIFICATIONS:

The primary function of turning the circulating pump on and off during the day, the SETR 0301 U provides important diagnostic and safety functions. For example, the LCD pictograms will indicate fault conditions such as sensor shorts or pump failure. The installation manual also clearly describes the fault symptoms, possible causes and remedies.

The control features a total of three inputs and one 120 VAC output for the circulating pump. Varistors protect the sensor inputs against high voltage spikes. The load side is fuse protected.

The control package includes two RTD 1000 ohm type (resistance temperature detector) sensors, a seven-foot line cord and a spare fuse. An optional third sensor displays the upper tank temperature and eliminates the need for an analog thermometer and fittings.

The numerous additional features of the SETR 0301 U include an adjustable on/off differential (8 - 20° F) and high limit (32° F - 205° F), an evacuated tube collector function, vacation overheat protection to minimize collector stagnation, and a freeze-recirculation option. Temperatures can be displayed in either Fahrenheit (F°) or Celsius (C°).

ITEM DISCRIPTION	PART NUMBER	CONNECTION	LENGTH	PRESSURE RATED	TEMPERATURE RATED		
Thermowell 2"	BX8TW-4550-C	¹ / ₂ " NPT	2″	160 psi	400°F		
Thermowell 6"	BX8TW-4550-C-6-SWT	¹ / ₂ " SWT	6"	160 psi	400°F		
Thermowell 9"	BX8TW-4550-C-9-SWT	¹ / ₂ " SWT	9″	160 psi	400°F		
PT 1000 10K Probe Sensor	SEPT1000-PRB	ThermoWell	4.9′	N/A	-58° F-356° F		

Accessories:

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