

## Differential Temperature Control



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**Fast, easy installation -  
reduces labor**

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**Diagnostic LEDs give  
instant system operation  
feedback**

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**Quick plug-in system  
monitoring capability via  
TD-GL**

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**Lightning and static elec-  
tricity protected**

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**Proven reliability with  
outstanding warranty  
coverage**

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**Sensors can be located up  
to 1000 feet away**

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**Precision electronic accu-  
racy within  $\pm 1^\circ\text{F}$**

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**Made in the USA!**

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### Specifications

**Input power**

120 VAC or 240 VAC

**Output**

SPDT powered contacts  
1HP@115VAC, 2HP@240VAC  
rating @ 240VAC:  
20A on NO contacts  
10A on NC contacts

**Differential**

8/4 to 24/4°F

**High Limit**

GL-30: 110° to 230°F  
GL-33: 50° to 104°F

**Environment**

15° to 130° F  
0 to 95% rH

**Accuracy:**

$\pm 1^\circ\text{F}$

**Dimensions**

5.875" x 4.875" x 2.375"

**Temperature Sensors**

Thermistor 10k @ 25°C/77°F  
not included

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### Description

The Goldline GL-30 and GL-33 differential temperature controls are designed to provide maximum operating efficiency and flexibility to effectively manage today's innovative solar energy systems. Both are a continuation of the advanced electronic technology which produced the popular C-30 and CM-30 controllers - standards of the solar industry since 1975, with hundreds of thousands of units installed worldwide. The GL-30 is capable of handling most differential temperature control functions for operation of domestic water heating and sophisticated space heating and cooling. The GL-33, with its adjustable high limit of 50°-104°F, make it the ideal control for pool/spa applications. Both models were designed to control recirculation, drain-back and closed loop systems.

**LED Indicators**

Three highly visible LEDs show; 1) power to control, 2) power out from control, 3) power out from control due to a recirculation mode to protect the system from freeze damage.

**GL-30 Output**

The GL-30 output is rated at 20 Amps and is designed to directly operate a pump or fan for heat collection when the controller is sensing an appropriate temperature differential

**Differential**

The GL-30 has an adjustable differential with a range of 8° to 24°F. Solar systems with long pipe runs normally require a higher turn-on differential temperature, and open loop systems with short pipe runs usually require a lower turn-on differential temperature for optimum performance. The GL-30 offers versatility to tailor controls to numerous specific systems designs.

**Storage High Limit**

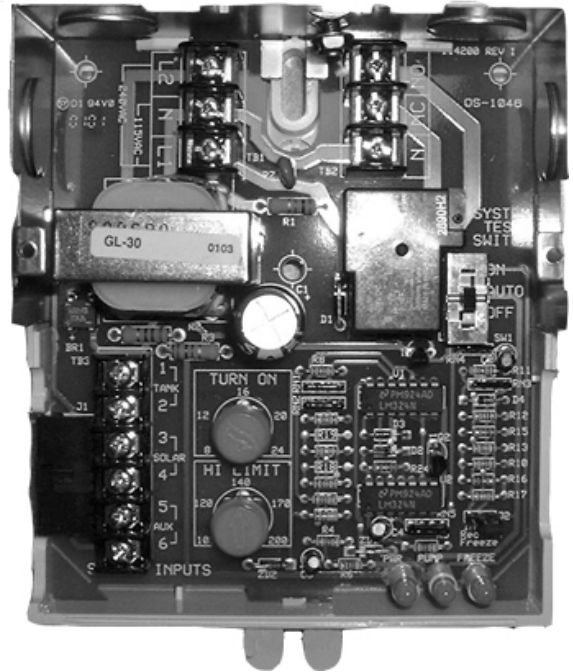
The GL-30 allows you to set a high limit storage temperature from 110° to 230°F.

**Recirculation Freeze Protection**

Recirculation freeze protection, when enabled, turns the GL-30 output on to circulate warmer storage water through the collectors when near freezing temperatures are reached at the collector sensor.

**System Test Switch**

The system test switch manually switches the GL-30 to ON, AUTO, or OFF for complete control over the system at all times.



**10 Year Limited Warranty**

Goldline Controls Inc. now offers a full 10 year limited warranty on all solar controls and accessories! This warranty will cover repair or replacement of the control at no cost for the first 24 months. For years 3 through 5, the repair/replacement fee will be a maximum of 25% of the current list price, and for years 6 through 10, the repair/replacement fee will be a maximum of 50% of the current list price. The best controls now have the best warranty. See the Goldline warranty statement for detail.

**Accessories**



**Goldline TD-GL Digital Monitor**

The GL-30 contains a quick plug-in adaptor for easy connection to a Goldline TD-GL snap-in digital monitor. This combination provides a digital readout of ±1°F temperature accuracy for maximizing operating efficiency. The TD-GL also has a minimum/maximum memory for temperatures seen at the collector sensor. The TD-GL may be snapped into the cover of the GL-30 series control or mount remotely.

The GL-30 may be connected in permanent installations or carried around as a convenient diagnostic tool. By simply plugging into a GL-30 control and reading the collector and storage temperature sensors, the technician can speed service on any job.

**Goldline Sensors**

Goldline provides a wide assortment of remote temperature sensors. These 10K ohm thermistor sensors are to be used with all Goldline temperature controls. General use and application specific sensor housings ensure that we have the sensor that will work best for your application.

