

SIM - Injection Mixing Control



Overview

The SIM is the perfect solution for Hydronic Heating Systems with a mix of high and low temperature zones. The SIM modulates the speed of the injection pump to precisely inject heat from the high temperature primary loop into the lower temperature secondary loop.

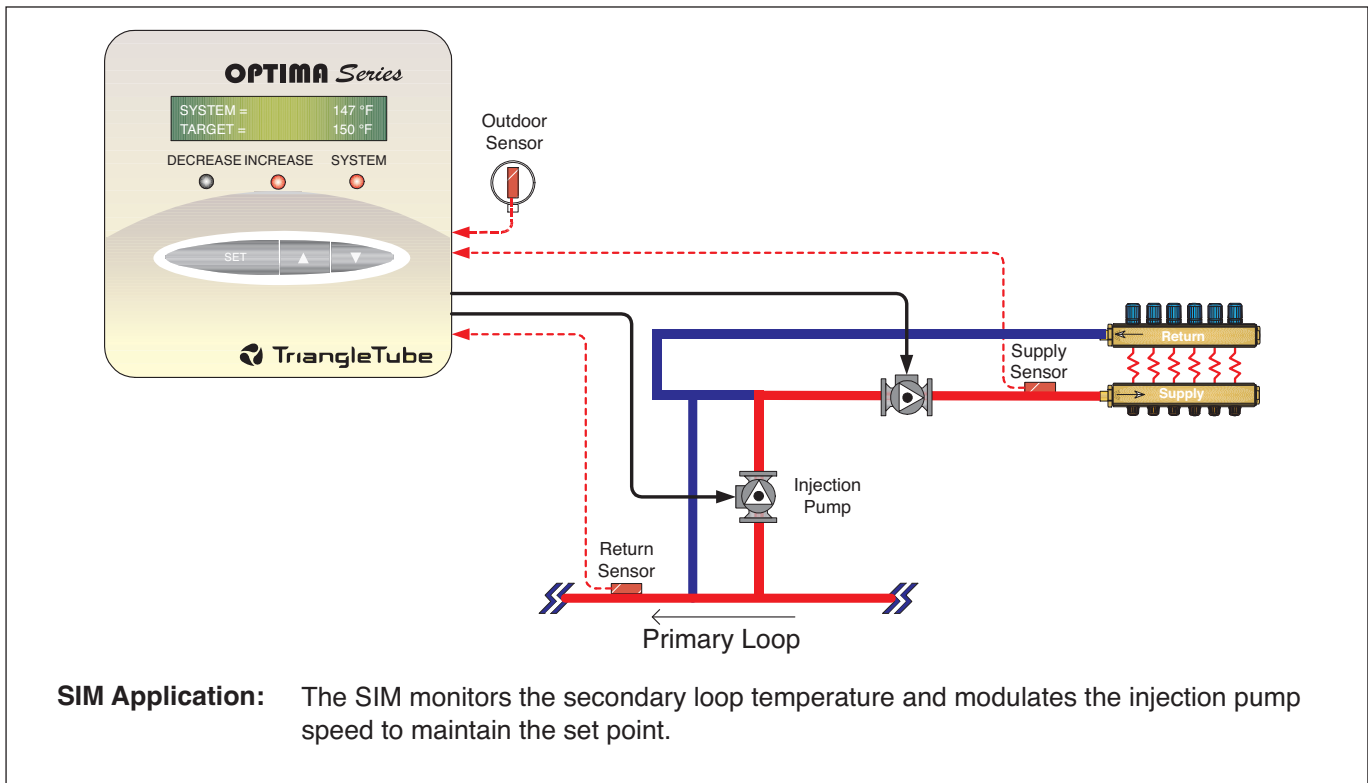
Features

- **Injection Pump Speed Control**
The SIM constantly adjusts the speed of the injection pump to maintain the desired set point for the lower temperature zones in the heating system. The SIM can operate the injection pump at a significantly lower speed than similar controls. This results in better temperature control and improved overall system efficiency.
 - **Fixed Set Point or Outdoor Reset**
The SIM can maintain either a fixed set point or operate using the outdoor reset function. The outdoor reset function utilizes fixed reset curves as well as providing the option for custom user defined heating curves.
 - **Secondary Loop Pump Operation**
The SIM can control the pump supplying the lower temperature zones and can also provide an optional Run-On time to disburse heat into the zones at the completion of a call.
 - **Outdoor Cutoff**
The optional Outdoor Cutoff function can disable the system when the outdoor temperature rises and heat is no longer required.
 - **Return Temperature Protection**
The SIM can monitor the return water temperature and lower the injection pump speed if the return temperature drops below an adjustable set point.
 - **External Enable**
The SIM can be remotely enabled from an external device or controller.
 - **Night Setback**
The SIM includes an external setback input which can lower the set point when less heat is required such as on nights or weekends. A Boost option can be used to quickly bring the room temperature back to normal after the Night Setback period.
 - **Sensor Fault Operation**
The SIM provides the option of running the injection pump at full speed or turning it off if a sensor fault should occur.
 - **Digital Display**
Large 2 x 16 character display provides status information as well as easy parameter adjustments in plain English.
 - **English or Metric Units**
The SIM can be configured to operate using either English or Metric units.
 - **Mounting Options**
The SIM can be mounted on a standard 4" x 4" electrical box or can be panel mounted using the included plastic wiring enclosure.
-

| Part # | Item Description |
|---------|--|
| PSCON11 | SIM Injection Mixing Control (Includes System, Return and Outdoor Temperature Sensors) |

SIM Specifications

| | |
|---------------------------------|--|
| Voltage Input: | .120VAC 60 Hz (2 Black wires) |
| Power Consumption: | .5 VA Max |
| Operating Temperature: | .20°F (-7°C) to 120°F (49°C) |
| Operating Humidity: | .20% to 80% |
| Dimensions: | .4"W x 4"H x 2 1/2" |
| Weight: | .1 pound |
| Display | .Back Lite Alphanumeric (2 rows x 16 char. each) |
| Output Relay Ratings: | .1 Amp inductive (Maximum of 1/8 HP), 6 Amp resistive at 120 VAC 60 Hz |
| Injection Output Ratings: | .1.5A inductive(Maximum 1/8 HP) at 120 VAC 50-60 Hz |
| Control Modes: | .Outdoor Reset, Set Point |
| Reset Ratios: | .12 ranging from 8:1 to 1:4 (Outdoor: System), and One Custom |
| Setback: | .0°F (0°C) to 80°F (44°C) |
| Boost: | .Yes, No |
| Sensor Fault Operating Options: | .Output On or Output Off |
| Set Point: | -.10°F (-23°C) to 230°F (110°C) |
| Minimum Return | .70°F (21°C) to 180°F (82°C) |
| Injection Pump Speed: | .0% to 100% |
| Buttons: | .3 (Set, Up, Down) |
| Pump Run-On: | .0 to 60 minutes |
| LEDs: | .3 LEDs (Left=Decrease/Close Middle=Increase/Open Right=System Relay) |



Freeway Center - 1 Triangle Lane Blackwood, NJ 08012
 Tel: (856) 228 8881- Fax: (856) 228 3584
 E-mail: info@triangletube.com - http://www.triangletube.com

