

AUTOMATIONDIRECT.com



Process Controllers

pro^{ense} SOLO[®]



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SOLO® Basic Temperature Controllers



Choose from 6 models

SOLO Basic Series Controllers

The economical SOLO Basic series of temperature process controllers offer a cost effective solution for users requiring a simple temperature control system without having to pay for unnecessary features. This single loop temperature controller can control a heating or cooling process using relay, voltage pulse or 4 to 20 mA current outputs. Models with two alarm outputs can be configured to use one of the alarm outputs as a second control output allowing both heating and cooling control or two stage heating or cooling.

SOLO Basic series support three control modes: PID, ON/OFF, and Manual.

With the SOLO® Basic series, you get:

- Auto Tuning (AT) function with PID control
- 1/16 DIN panel size
- Single loop heating and/or cooling control at an unbelievable low price
- Includes free award-winning technical support

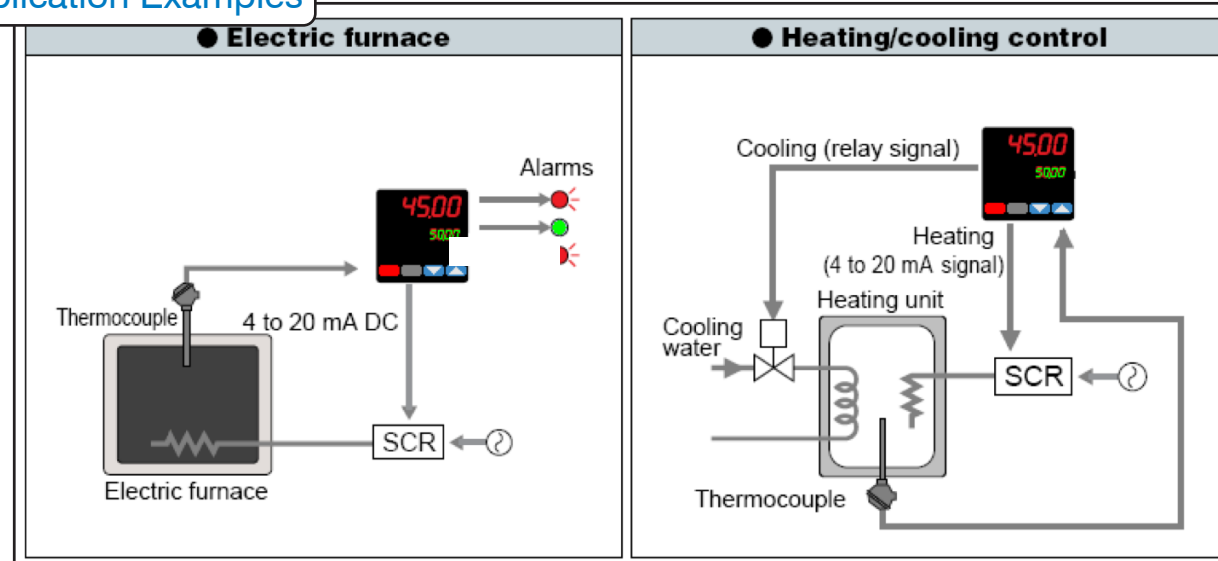
Thermocouple and RTD inputs

All SOLO Basic series controllers support 15 temperature input types, and with a few simple steps from the industry's best installation documentation, and your process will be up and running in no time.



Simple pushbutton navigation programming.

Application Examples



SOLO® Standard Process and Temperature Controllers



Choose from 30 models

SOLO Standard Series Controllers

The powerful SOLO® Standard series of temperature process controllers take a signal from a temperature device, such as a thermocouple or RTD, or from a pressure/ flow/ level sensor, and maintain a setpoint using an output signal (relay, voltage pulse, current, or linear voltage depending on model). SOLO Standard series support four control modes: PID, ON/OFF, Ramp/Soak and Manual.

With the SOLO® Standard series, you get:

- Precise control
- Flexible connectivity
- The right size to fit your application
- An unbeatable price that includes free award-winning technical support
- AC powered or 24VDC models

Universal inputs

All SOLO Standard series controllers support 13 temperature input types and 5 analog input types, and with a few simple steps from the industry's best installation documentation, and your process will be up and running in no time.



Simple pushbutton navigation programming, or download the FREE software from our Website for programming and monitoring the SOLO controllers.

Select the SOLO® standard controller that best fits your application

SOLO brand controllers offer you outstanding features at unbeatable prices:

- 4 standard DIN sizes with a dual 4-digit, 7-segment displays for Process Variable and Setpoint
- Dual output control for heating and cooling
- Built-in PID with Autotuning (AT) function for fast and easy startups
- Universal inputs, including T/C, RTD, and DC voltage, are standard on all controllers, mA and mV are standard on all SL models
- Flexible control modes to fit your process include PID, On/Off and Manual for all controllers and Ramp/Soak for SL models
- IP65 environmental rating (when mounted in appropriate enclosures)

Features	1/32 DIN SL4824	1/16 DIN SL4848	1/8 DIN SL4896	1/4 DIN SL9696
Display of PV & SP	Yes	Yes	Yes	Yes
RS-485, MODBUS RTU/ASCII	Yes	Yes	Yes	Yes
Two Separate Event Inputs	No	No	Yes	Yes
Dual Outputs for Heating & Cooling Loops	Yes	Yes	Yes	Yes
Available Alarms Groups	1	3	3	3
Auto Tuning Capability	Yes	Yes	Yes	Yes
Universal Inputs (T/C, RTD, mV & mA)	Yes	Yes	Yes	Yes
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Modular Temperature Controllers

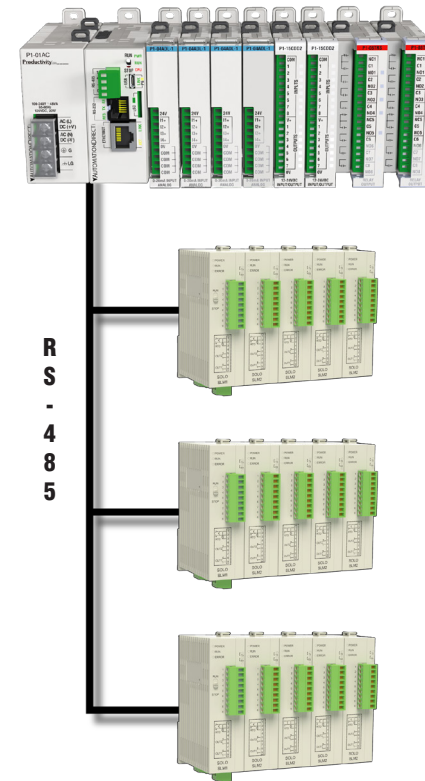
SOLO[®] Modular Temperature Controllers

SOLO modular temperature controllers consist of one control module and up to seven expansion modules to support up to eight independent control loops. Each module accepts thermocouple, RTD, mA, mV, or voltage inputs and provide two outputs for alarming or PID, On/Off, Ramp/Soak, or manual control modes.



Features

- Compact modular multi-loop temperature control system
- Up to eight temperature control loops
- PID, On/Off, Ramp/Soak, or manual control modes
- Process variable retransmission on current or voltage models
- 24 VDC operating voltage
- Voltage, current, voltage pulse, or relay outputs (depending on model)
- 12 alarm modes
- Additional relay output on all models
- Modbus ASCII/RTU communication via RS-485
- Free downloadable SL-SOFT configuration and monitoring software

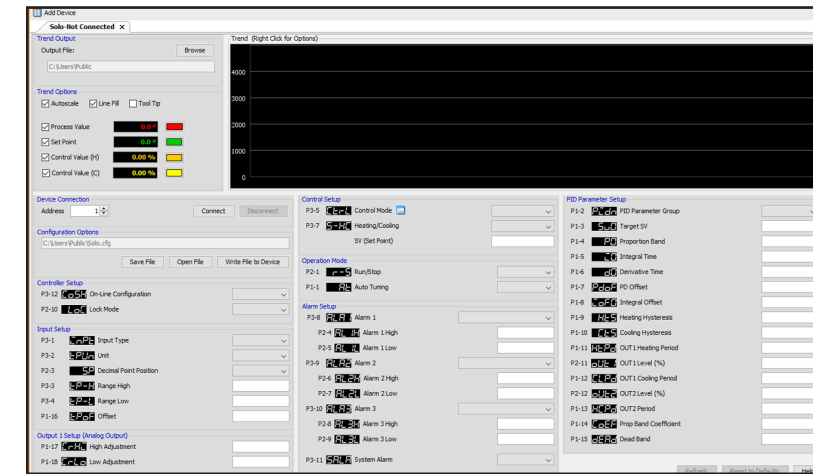


Use a PLC, HMI, or PC to collect data from the controllers and then have your program trigger events based on the values

Simple Configuration and Control

FREE configuration and monitoring software

That's right, FREE! Configuration and monitoring software (SL-SOFT, Version 3.0 downloadable from our Web site) allows you to configure each controller with ease and gives you data analysis capabilities for up to 16 units simultaneously.



FREE software that's easy-to-use and intuitive, with a GUI that make setting up the SOLO series of temperature controllers a breeze. (Download at <http://support.automationdirect.com/downloads.html>)

Process control setup made easy

All units support RS-485 serial communications (up to 38.4K bps), which allows you to use the free configuration software [SL-SOFT] to configure and monitor multiple SOLO controllers using Modbus RTU or Modbus ASCII protocols. For even simpler setup, the controller can be configured manually with the user-friendly keypad on each unit.

Collect and act on data

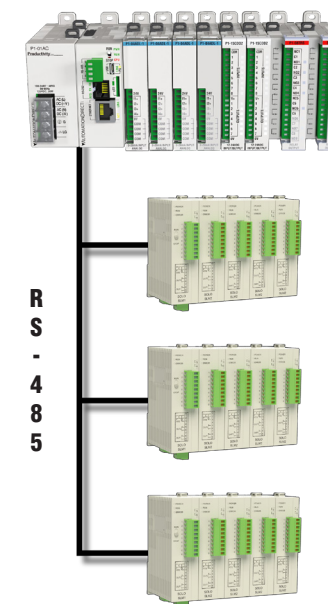
Using RS-485 communications, the SL-SOFT utility provides the ability to monitor and log historical data, using the built-in trending graph, from up to 16 devices and save it to a file.

Connect to other hardware

The RS-485 communications of the SOLO Temperature Controller can also provide connection to any HMI, PC or PLC supporting industry-standard Modbus RTU or Modbus ASCII protocol. This allows you to collect, monitor and have your application react to data being read from the SOLO controllers.

PLC Connection

Use a PLC to collect data from the controllers and then have your program trigger events based on the values



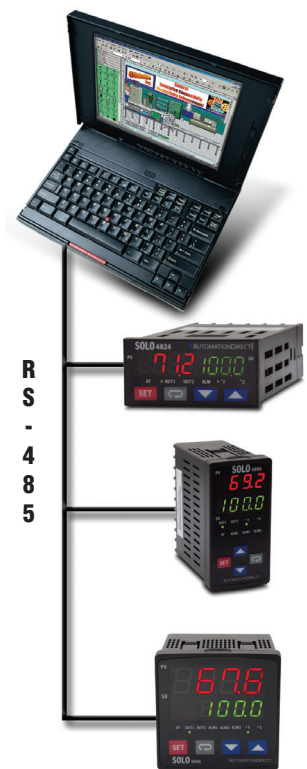
HMI Connection

Use an operator interface to collect data and monitor your process.



PC Connection

Use a PC to configure and monitor your SOLO controllers with SL-SOFT. Use the trending graph to monitor and log historical data.



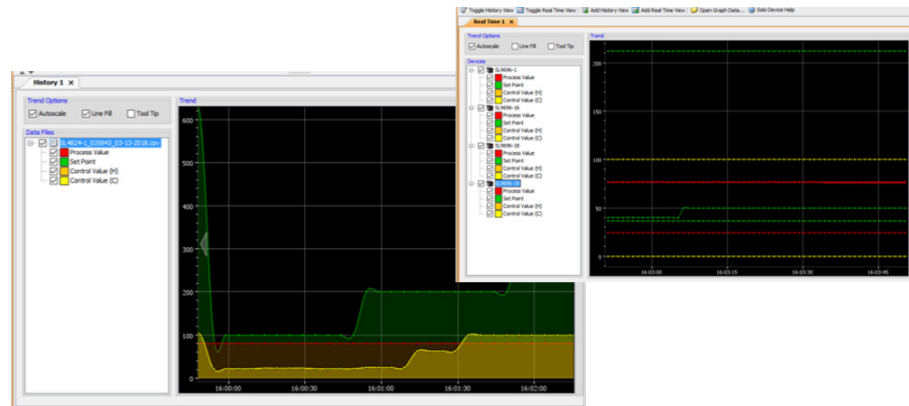
Dynamically View and Archive Process Data



Global graph

Capture historical temperature data to your PC for trending and more. SL-SOFT V3.0 allows display of trend graphs from live and saved data, so you can graph process values, set points, and control values (for both heating & cooling).

- Select active pens and pen colors for each trend
- The Autoscale feature fits the vertical scaling (y-axis) to the window
- Tool Tips allow you to hover over a line on the graph and get details about that value
- Display data from multiple devices on one chart, if desired.



Save and load entire configurations

Use the SL-SOFT V3.0 to save your Solo configuration settings to disk. Then program a new controller with just a few clicks.

All the configuration parameters are available via the software interface and the faceplate of the Solo controller.

Create ramp/soak profiles

Ramp the effective setpoint towards the final target value at a predefined rate with ramp/soak profiles.

Step	SV	Time (H:M:S)	Pattern 0	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Pattern 7
Step 0	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Step 1	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Step 2	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Step 3	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Step 4	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Step 5	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Step 6	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Step 7	SV	00:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Last Step Nbr	7	7	7	7	7	7	7	7	7	7
Additional Cycles	0	0	0	0	0	0	0	0	0	0
Next Pattern Nbr	0	0	0	0	0	0	0	0	0	0

Read the pattern stored in the device

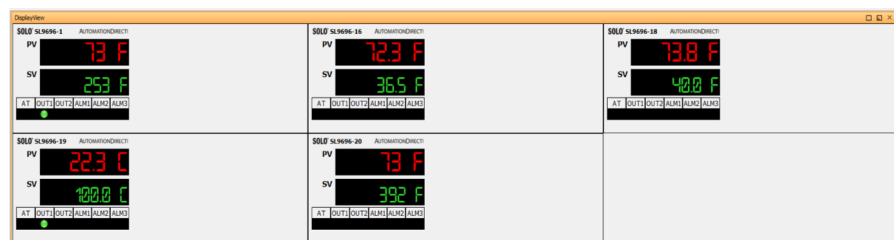
Send current pattern to the device

Open a previously created pattern

Write current pattern to a file to be stored offline

Faceplate view

Display the face plates of multiple connected controllers (up to 16). View the process and setpoint values, alarm indication and more - in real time - right from your desk or other factory PC.

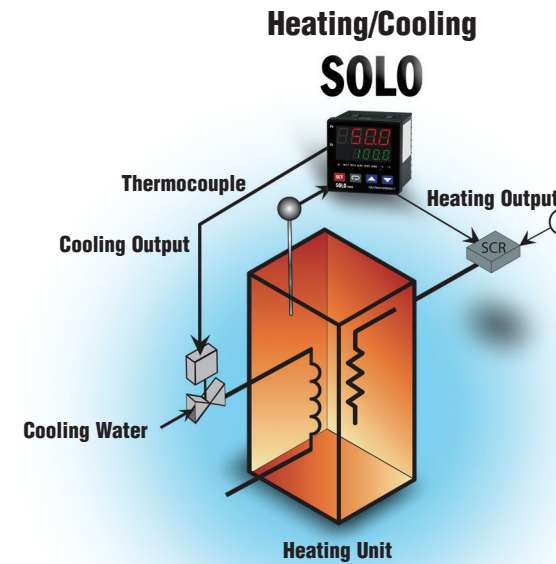


SOLO® Process and Temperature Controllers

Where can you put SOLO to work?

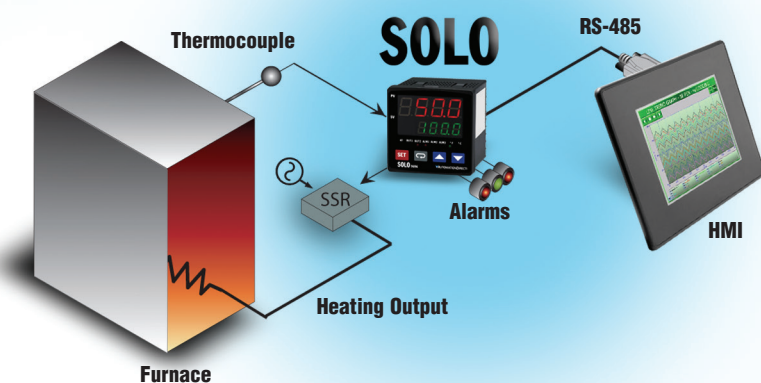
Process and temperature controllers are powerful process control tools, but they offer very simple operation. SOLO controllers can be used in a variety of applications, either as a stand-alone monitor or controller, or in conjunction with a PLC or other intelligent device.

For example, SOLO can perform simple monitoring (figure at bottom) and alert an operator to abnormal conditions via alarm LEDs on the unit or via a discrete relay alarm output. Data can also be collected and stored by an HMI such as C-more. For stand-alone control loops, SOLO can use a single output (such as furnace control shown below); the dual-output feature makes heating/cooling control straightforward (example at left).

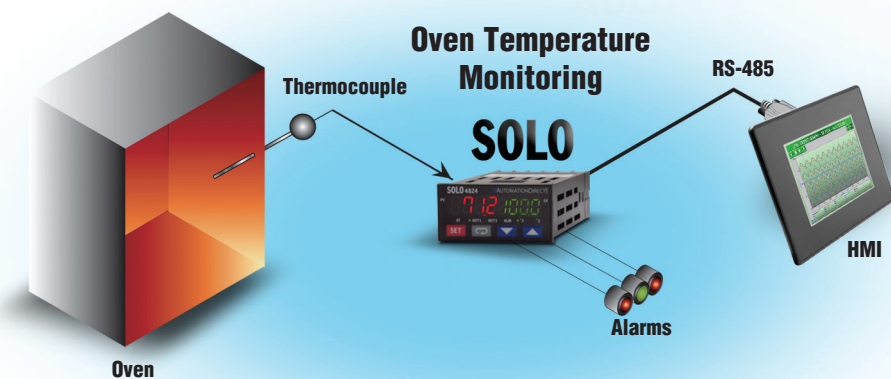


Industrial Heating/Cooling

Furnace Control



Oven Temperature Monitoring



Advanced Process Controllers

pro^{ense} PPC5 Series Advanced Process Controllers

ProSense PPC5 series advanced process controllers are made exclusively for AutomationDirect by Yokogawa. These controllers are loaded with features, functionality, and powerful performance to handle temperature, pressure, level, flow, and other process variable control applications. They accept inputs directly from thermocouples or RTD's and analog signals from practically any type of process variable sensor/transmitter.

Models

- **PPC5-1000:** No auxiliary analog input and no communications
- **PPC5-1001:** No auxiliary analog input with RS-485
- **PPC5-1002:** Auxiliary analog input with Ethernet
- **PPC5-1100:** Auxiliary analog input but no communications
- **PPC5-1101:** Auxiliary analog input and RS-485
- **PPC5-1102:** Auxiliary analog input and Ethernet

Features

- Thermocouple, RTD, mA, mV, or voltage inputs
- Remote setpoint analog input: V (5 ranges) PPC5-11xx models only
- 50, 100, or 200ms selectable control period
- 100-240 VAC operating voltage
- Up to four dry contact or NPN inputs for 17 selectable functions
- Relay, voltage pulse, or linear current output
- mA retransmission output selectable for PV, SP, target SP, remote SP, or output
- 15 VDC loop power available when not using the retransmission output
- Three dry contact alarm outputs with 30 selectable alarm types and 10 alarm functions
- Communications: Models without communications, RS-485, Modbus slave ASCII / RTU, Coordinated communication, or Ethernet+RS-485 gateway, Modbus TCP/IP
- Configuration via keypad or free downloadable software
- Three user function keys with 22 selectable functions
- Large 5-digit, color LCD with two selectable bar graphs



\$426.00
PPC5-1000