

- 100 Ω Platinum RTD
- 316 Stainless Steel Probe
- Capture Minimum and Maximum Readings

- Selectable Units
- NEMA 4X Housing
- Fits Standard Thermowells

Specifications

Ranges and Resolution

-58.0°F to 392.0°F or -50.0°C to 200.0°C
 Extrapolated range for out-of-range conditions
 0.1 degree resolution
 User selectable °F or °C

Accuracy

Includes linearity, hysteresis, repeatability
 ±0.3°C at 0°C, ±1.1°C at 150°C
 11-point linearization

Display

4 readings per second nominal display update rate
 4 digit LCD, 0.5" H
 5 character 0.25" H alphanumeric
 BL models: red LED backlight

Two front panel bi-color red/green LEDs for alarm status indication

ALARM1 temperature over range indication
 ALARM2 temperature under range indication

Relay Output

Two independent SPDT relays
 0.5A/115VAC, 1A/24VDC, non-inductive
 Alarm status updated 4 times per second nominal
 Alarm configuration mode can be pass code protected
 Each alarm programmable for either HI or LO set point
 Each alarm programmable for deadband in degrees
 Selectable upscale or downscale burnout
 Selectable normal or reverse alarm action

Factory defaults: °F temperature scale, SP1 HI, SP2 LO, 1° deadband, downscale burnout, normal alarm action, configuration and test mode not pass code protected.

3 ft long, 6-conductor 22 AWG cable for relays

Power

8 to 24 VAC 50/60 Hz or 9 to 32 VDC
 Reverse polarity protected
 3 ft long, 2-conductor 22 AWG cable for power

Sensor

IEC-751 Class B 100 Ω Platinum RTD, 0.00385 alpha curve
 ½" NPT male, 316 stainless steel
 Spring-loaded probe versions fit standard thermowells

Controls & Functions

4 button front keypad for setup, calibration, and configuration.
 Multi-level user-defined pass codes to prevent unauthorized changes.
 Pass code optional for output test and set point changes.
 Pass code required for configuration and calibration.

Output Test Function

Test mode to toggle alarm relays
 Output test function can be pass code protected

Calibration

User settable pass code required to enter calibration mode
 Zero and span temperature calibration
 Non-interactive zero, span, and linearity, ±10% of range

Weight

Product: 12 ounces (approximately)
 Shipping: 1 pound (approximately)

Housing Material

ABS/polycarbonate NEMA 4X case, rear gasket, polycarbonate label, aluminum sensor block

Storage Temperature

-40 to 203°F (-40 to 95°C)

Operating Range

-4 to 185°F (-20 to 85°C) at housing



ThermoPro T16ADA Temperature Alarm

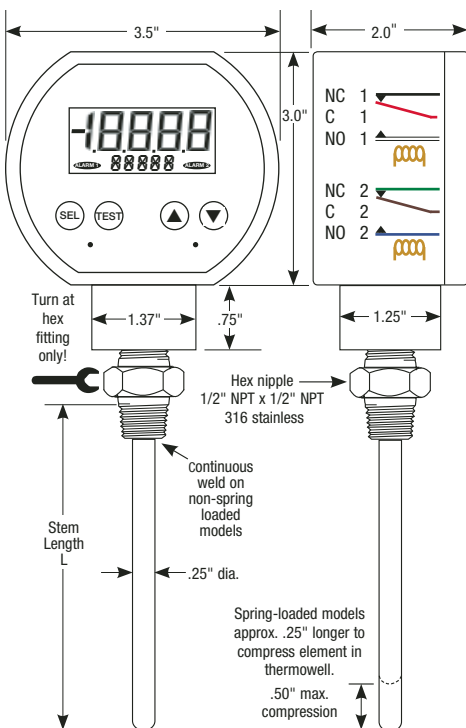
Thermowell Stem Length

See thermowell manufacturer's specifications. Probe length is measured from top of full threads to tip of probe.

Quick Link
cecomp.com/thermopro



Dimensions



Wiring

2-conductor 22 AWG power cable	
BLACK	8 to 24 VAC 50/60 Hz or 9 to 32 VDC
RED	

6-conductor 22 AWG relay cable		
BLACK	Normally Closed (NC)	SPDT 1
RED	Common (C)	
WHITE	Normally Open (NO)	
GREEN	Normally Closed (NC)	SPDT 2
BROWN	Common (C)	
BLUE	Normally Open (NO)	

Alarm Contact Ratings
 0.5A/115VAC, 1A/24VDC, non-inductive

Cecomp maintains a constant effort to upgrade and improve its products. Specifications are subject to change without notice. Consult factory for your specific requirements.

How to Order

If you require a certain configuration to be pre-set from the factory, please indicate it on your order.

Option—add to end of model number

-CC Conformal coating on circuit board for moisture resistance

Model	Length	Backlighting	
T16ADA2	2.5" L fixed length	None	
T16ADA4	4" L fixed length		
T16ADA6	6" L fixed length		
T16ADA9	9" L fixed length		
T16ADA12	12" L fixed length		
T16ADA2S	2.5" L spring-loaded		
T16ADA4S	4" L spring-loaded		
T16ADA6S	6" L spring-loaded		
T16ADA9S	9" L spring-loaded		
T16ADA12S	12" L spring-loaded		
T16ADABL2	2.5" L fixed length		Red LED display backlight
T16ADABL4	4" L fixed length		
T16ADABL6	6" L fixed length		
T16ADABL9	9" L fixed length		
T16ADABL12	12" L fixed length		
T16ADABL2S	2.5" L spring-loaded		
T16ADABL4S	4" L spring-loaded		
T16ADABL6S	6" L spring-loaded		
T16ADABL9S	9" L spring-loaded		
T16ADABL12S	12" L spring-loaded		

Adjusting Set Point 1 (continued)

While in the Set Point 1 Adjust Mode, the display will indicate Trip Point 1 with TRIP1 blinking at a slow rate on the lower display.

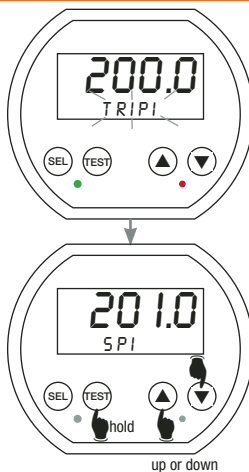
To adjust Set Point 1, press and hold the TEST button and the display will indicate SP1 on the lower display. If the alarm is not tripped the display will change by an amount equal to the deadband value.

While holding the TEST button operate the ▲ and ▼ buttons to adjust Set Point 1 to the desired value. The Set Point 1 value is stored when the TEST button is released.

Note that the unit will not respond to changes in temperature, LEDs are turned off, and the alarm relays will maintain their prior states while the TEST button is held.

To exit the Set Point 1 Adjust Mode, press and release the SEL button. The display briefly indicates - - - - and then returns to normal operation.

"Set Point" is defined as the temperature that will result in a change of state only from a normal to an alarm condition. "Trip Point" is defined as the value of RTD temperature that will result in a change of state of alarm condition, and includes the effect of deadband when returning from an alarm to a normal condition.



Adjusting Set Point 2 (continued)

During pass code entry the LEDs will turn off and the unit will not respond to temperature changes. The alarm relays will maintain their prior states. The unit will automatically revert to normal operation if no buttons are pushed for 15 seconds.

While in the Set Point 2 Adjust Mode, the display will indicate Trip Point 2 with TRIP2 blinking at a slow rate on the lower display.

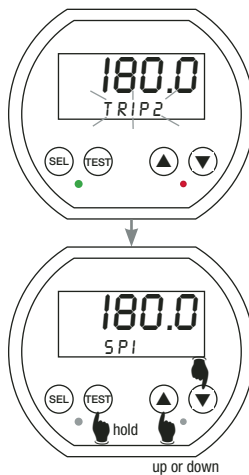
To adjust Set Point 2, press and hold the TEST button and the display will indicate SP2 on the lower display. If the alarm is not tripped the display will change by an amount equal to the deadband value.

While holding the TEST button operate the ▲ and ▼ buttons to adjust Set Point 2 to the desired value. The Set Point 2 value is stored when the TEST button is released.

Note that the unit will not respond to changes in temperature, LEDs are turned off, and the alarm relays will maintain their prior states while the TEST button is held.

To exit the Set Point 2 Adjust Mode, press and release the SEL button. The display briefly indicates - - - - and then returns to normal operation.

"Set Point" is defined as the temperature that will result in a change of state only from a normal to an alarm condition. "Trip Point" is defined as the value of RTD temperature that will result in a change of state of alarm condition, and includes the effect of deadband when returning from an alarm to a normal condition.



Adjusting Set Point 2

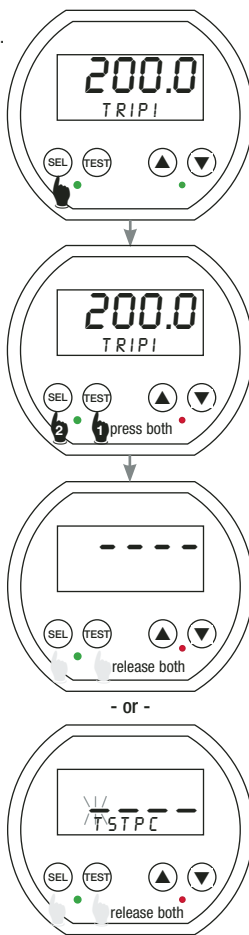
Alarm 2 factory default: LO alarm, -58.0°F trip point.

From the normal mode press the SEL button until Trip Point 2. Release the SEL button.

While TRIP1 is displayed, press and hold the TEST button and then press the SEL button.

Release both buttons when the display indicates - - - -.

If pass code protection is enabled, before the unit enters the Alarm Test Mode, the display indicates - - - - with the left-most underscore blinking, and with TSTPC on the lower display. Enter the user-defined pass code (3510 factory default) as described in the Pass Code Entry section.



Pass Code Entry

Before the unit enters a pass code protected mode, the display initially indicates - - - - with the first underscore blinking, and with CFGPC, CALPC, or TSTPC on the lower display, depending on how the mode was entered.

Note that the unit will not respond to changes in temperature, LEDs are turned off, and the alarm relays will maintain their prior states while in the pass code entry mode.

The unit will automatically revert to normal operation if no buttons are operated for approximately 15 seconds.

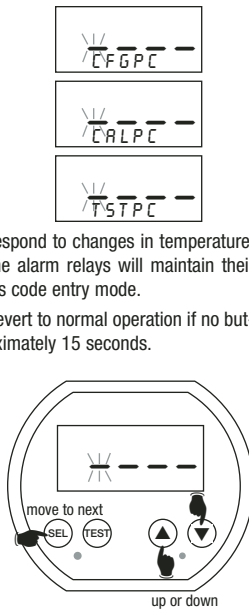
Enter the user-defined pass code (3510 factory default).

Use the ▲ and ▼ buttons to increase or decrease the numerical value.

Press and release the SEL button to index to the next position.

Once the 4-digit user-defined pass code has been entered, press and release the SEL button to proceed to the specific mode of operation.

Note: If an incorrect pass code was entered, the unit will exit to the normal operating mode.



Pass Code Modification

During pass code entry the LEDs will turn off and the unit will not respond to temperature changes. The alarm relays will maintain their prior states. The unit will automatically revert to normal operation if no buttons are pushed for 15 seconds.

Configuration Pass Code

From the normal operating mode press and hold the TEST and the ▲ buttons. Then press the SEL button. Release all buttons when the display indicates CFG. The display initially indicates - - - - with the first underscore blinking, and with CFGPC on the lower display.

Calibration Pass Code

Press and hold the TEST and the ▼ buttons. Then press the SEL button. Release all buttons when the display indicates CAL. The display initially indicates - - - - with the first underscore blinking, and with CALPC on the lower display.

Test and Set Point Adjust Pass Code (optional)

The option for pass code protected alarm testing or set point changes is set in CFG mode.

Press and hold the TEST button. Then press the SEL button. Release all buttons when the display indicates - - - -.

If TSTPC pass code is enabled, the display indicates - - - - with the first underscore blinking, and TSTPC on the lower display.

Factory Pass Code Entry (1220 factory default)

Use the ▲ and ▼ buttons to increase or decrease the numerical value.

Press and release the SEL button to index to the next position.

Once the 4-digit user-defined pass code has been entered, press and release the SEL button to proceed. If an incorrect pass code was entered, the unit will exit to the normal operating mode.

Once the correct password has been entered, the display will indicate the existing pass code with CFGPC, CALPC, or TSTPC on the lower display.

Operate the ▲ or ▼ button to select the first character of the new pass code. Press and release the SEL button to proceed to the next character. Repeat until the entire pass code is complete. Write down the new pass code in a secure place.

To exit the Pass Code Modification mode, press and hold the SEL button. Release the button when the display indicates - - - - to restart the unit in the normal mode.

The unit proceeds through a restart sequence during which all active display segments are turned on for approximately 1 second. During the restart sequence, the alarm relays are de-energized and the alarm status LEDs are off.

