



Single-Loop Temperature/Process Controller

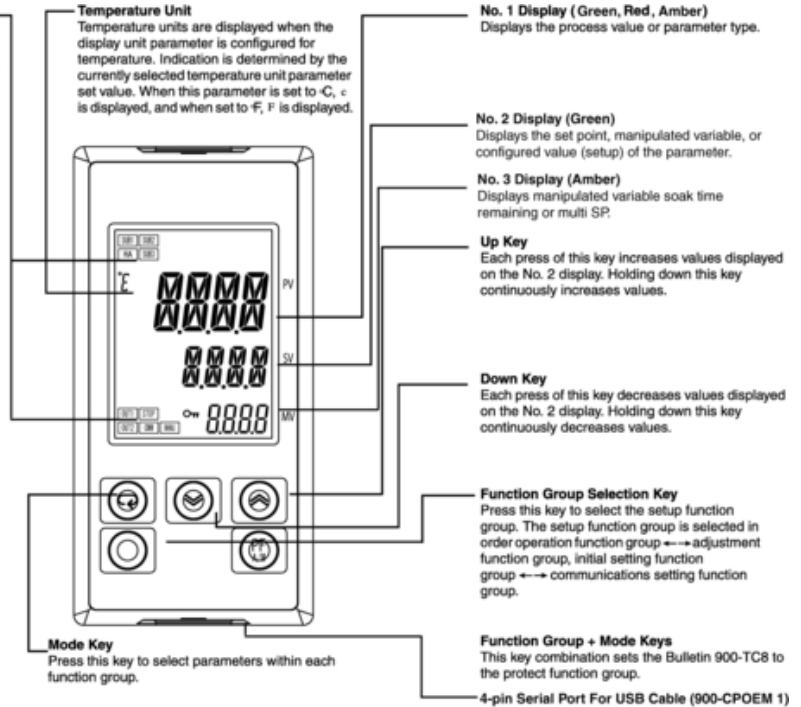
General Functions

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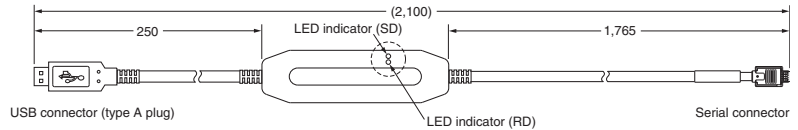
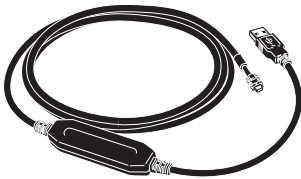
Bulletin 900-TC8

Operation Indicators

1. SUB 1 — Lights when auxiliary 1 output is ON
SUB 2 — Lights when auxiliary 2 output is ON
SUB 3 — Lights when auxiliary 3 output is ON
2. HA (red heater burnout alarm display) — Lights when a heater burnout is detected. The heater burnout alarm remains ON by setting the heater burnout latch. To reset, turn the power supply OFF and then ON or set the heater burnout alarm value to 0.0 A.
3. OUT1, OUT2 (amber control output 1, control output 2) — Lights when control output 1 and/or control output 2 are ON.
4. STOP (amber stop) — Lights when control of the Bulletin 900-TC8 has been stopped. During control, this indicator lights when an event or the run/stop function has become stopped. Otherwise, this indicator is out.
5. CMW (amber communications writing control) — Lights when communications writing is enabled and is out when it is disabled.
6. MANU (Manual Mode) — Lights when the controller mode is in manual.
7.  (Key) — Lights when these settings change protection is ON () Keys disabled.



USB-Serial Conversion Cable (900-CPOEM1)



- **Note:** To use the cable you must first download a USB driver (free download). To get the driver, go to <http://www.ab.com> and use the A-Z Product Directory under "Resources" to locate the Temperature Controller home page. When the Bulletin 900-TC Single-Loop Controller website is displayed, go to "Get Software" selection in the upper right and click on 900-CPOEM1 driver. Follow the instructions.
- Do not connect or disconnect the Conversion Cable connector repeatedly over a short period of time. The computer may malfunction.
- Do not connect the Conversion Cable through a USB hub. Doing so may damage the Conversion Cable.
- Do not use an extension cable to extend the Conversion Cable length when connecting to the computer. Doing so may damage the Conversion Cable.
- When using this cable with 900 BuilderLite software, the software communication settings (ComSet) must be as follows:

Parameter	Set-up Value
Communications unit no.	01
Communications baud rate	38.4 (kbps)
Communications data length	7 (bits)
Communication stop bits	2
Communication parity	Even

Single-Loop Temperature/Process Controller

General Functions, Continued

Bulletin 900-TC16

Bulletin 900-TC16

Operation Indicators

- SUB1 — Lights when auxiliary 1 output is ON.
SUB2 — Lights when auxiliary 2 output is ON.
- HA (red heater burnout alarm display)—Lights when a heater failure (open or short) is detected. The heater burnout alarm remains ON by setting the heater burnout latch. To reset, turn the power supply OFF and then ON or set the heater burnout alarm value to 0.0 A.
- OUT1, OUT2 (amber control output 1, control output 2)— Lights when control output 1 and/or control output 2 (cool) are ON.
- STOP (amber stop)— Lights when control of the Bulletin 900-TC16 has been stopped. During control, this indicator lights when an event or the run/stop function has become stopped. Otherwise, this indicator is out.
- CMW (amber communications writing control)—Lights when communications writing is enabled and is out when it is disabled.
- MANU (Manual Mode)— Lights when the controller mode is in manual.
- Key (Key)— Lights when the settings change protection is ON (Key). Keys disabled.

Function Group Selection Key

Press this key to select the setup function group. The setup function group is selected in order operation function group → adjustment function group, initial setting function group ↔ communications setting function group.

Temperature Unit

Temperature units are displayed when the display unit parameter is configured for temperature. Indication is determined by the currently selected temperature unit parameter set value. When this parameter is set to C, °C is displayed, and when set to F, °F is displayed.

No. 1 Display (Programmable Red, Green or Amber)
Displays the process value or parameter type.

No. 2 Display (Green)
Displays the set point, manipulated variable, or configured value (setup) of the parameter.

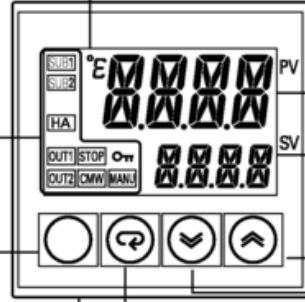
Up Key
Each press of this key increases values displayed on the No. 2 display. Holding down this key continuously increases values.

Down Key
Each press of this key decreases values displayed on the No. 2 display. Holding down this key continuously decreases values.

Mode Key
Press this key to select parameters within each function group.

Function Group + Mode Keys
This key combination sets the Bulletin 900-TC16 to the protect function group.

4 Pin Serial port for USB cable (900-CPOEM1)



Bulletin 900-TC32

Bulletin 900-TC32

Operation Indicators

- AL (red alarm)— Lights when alarm output is ON.
- CMW (amber communications writing control)— Lights when communications writing is enabled and is out when it is disabled.
- STP (amber stop)— Lights when control of the Bulletin 900-TC32 has been stopped. During control, this indicator lights when an event or the run/stop function has become stopped. Otherwise, this indicator is out.
- OUT (amber control output)— Lights when control output is ON.

Function Group Selection Key

Press this key to select the setup function group. The setup function group is selected in order operation function group → adjustment function group, initial setting function group ↔ communications setting function group.

Temperature Unit

Temperature units are displayed when the display unit parameter is configured for temperature. Indication is determined by the currently selected temperature unit parameter set value. When this parameter is set to C, °C is displayed, and when set to F, °F is displayed.

No. 1 Display (Red)
Displays the process value or parameter type.

No. 2 Display (Green)
Displays the set point, manipulated variable, or set value (setup) of the parameter.

Up Key
Each press of this key increases values displayed on the No. 2 display. Holding down this key continuously increases values.

Down Key
Each press of this key decreases values displayed on the No. 2 display. Holding down this key continuously decreases values.

Mode Key

Press this key to select parameters within each function group.

Function Group + Mode Keys
This key combination sets the Bulletin 900-TC32 to the protect function group.

