TPC9 Temperature Sensor Substitute Instructions

For use with the 900 Series Multi-Parameter Monitor/Controller RTD input channel.
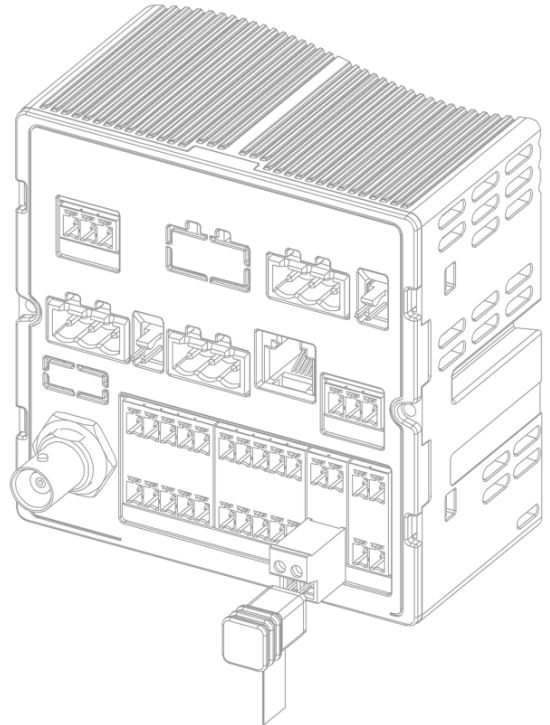
⚠ **WARNING**	Remove power to the instrument's power input and all relays by interrupting them at the main power panel or circuit breakers before servicing the back panel or any of the wiring/connectors. Failure to do so could cause damage to the instrument and be harmful or fatal to personnel. Only qualified personnel should install or service electrical equipment.

NOTE: Verifying the RTD Input circuitry using a TPC9 Temperature Sensor Substitute does not take the sensor condition or cable into account.

To verify the RTD input circuitry using a TPC9 Sensor Substitute:
1. Turn the system's power supply OFF (see WARNING above).
2. Remove the RTD sensor connector from the back panel.
3. Plug the TPC9 Sensor Substitute into the RTD Input on the back panel.
4. Turn the system's power supply ON.
5. Set the sensor cable length to zero:
    a. From the RTD input channel's "Detailed Operating Screen", tap the ADJUST button to enter EDIT Mode.
    b. Tap the Input Channel button on the top center of the screen.
    c. Tap the "Cable Length" field.
        NOTE: Record the sensor cable length to reprogram after verification.
    d. Using the keypad, change the cable length to 0.00 then tap "Enter".
    e. Tap the ACCEPT button.
6. Perform the verification:
    a. Verify the displayed temperature reading is 25.0˚C ±0.1.
        NOTE: If there has been any previous adjustment to the temperature calibration on the RTD Input channel, that change will be reflected in the displayed value. To see the raw (uncalibrated) value, perform a FAC CAL on the temperature for the RTD input channel (erasing any user adjusted calibration).
7. Turn the system's power supply OFF (see WARNING above).
8. Remove the Sensor Substitute from the back panel.
9. Reconnect the RTD sensor to the RTD Input on the back panel.
10. Turn the system's power supply ON.
11. Reprogram the RTD sensor's cable length.
    a. From the RTD input channel's "Detailed Operating Screen", tap the ADJUST button to enter EDIT Mode.
    b. Tap the Input Channel button on the top center of the screen.
    c. Tap the "Cable Length" field.
    d. Using the keypad, enter the sensor's cable length then tap "Enter".
    e. Tap the ACCEPT button.
12. Tap the gray measurement value to return to normal operating mode.