



8-Channel Benchtop Digital Thermometer/ Data Logger

For Thermocouple or RTD Sensors with USB Port

DP9800 Series



- ✓ High Precision
- ✓ USB PC Interface
- ✓ Thermocouple and RTD Models
- ✓ Built-In Display for Selected Channel or Scanned Channels
- ✓ Resolution 0.1°C on LCD Display, 0.01°C in Software
- ✓ Self-Calibration Feature
- ✓ Select °C/°F
- ✓ PC Software Included for Remote Control and Measure, Logging and Calibration
- ✓ Simple Operation

The DP9800 Series thermometer can be used in conjunction with a PC to provide accurate, versatile 8 channel thermocouple and Pt100 RTD temperature measurements, scanning and logging of measured values. It can also be used as a "stand alone" indicator/logger and incorporates a digital backlit LCD display of measured temperature.

The built-in self-calibration facility for the DP9800-TC thermocouple model is a rapid and convenient method for on-site calibration and does not require any additional equipment other than a special, external link. Self-calibration of Pt100 ranges is equally simple and uses plug-in precision resistors.

The DP9800 is designed to provide exceptional stability with high measurement resolution and represents an ideal crossover between plant practicality and laboratory performance at a very competitive price.



DP9800 shown smaller than actual size.

The PC software supplied with the instrument allows control, measure and calibration functions.

Specifications

At an ambient temperature of 20°C

Input/Ranges: Thermocouple to IEC 584

Type J: -200 to 750°C (-328 to 1382°F)

Type K: -200 to 1200°C (-328 to 2192°F)

Type T: -200 to 350°C (-328 to 662°F)

Type E: -200 to 900°C (-328 to 1652°F)

Type N: 0 to 1300°C (32 to 2372°F)

Type R: 0 to 1760°C (32 to 3200°F)

Type S: 0 to 1760°C (32 to 3200°F)

Type B: 300 to 1800°C (572 to 3272°F)

Pt100 to IEC751, 3-Wire: -200 to 850°C (-328 to 1562°F)

Note: all inputs are non-isolated and thermocouples must be ungrounded style.

Accuracy: Thermocouples J, K, T, E, and N, better than $\pm 0.1^\circ\text{C} \pm 0.1\%$ of range zero to span $\pm 0.15\%$ of range -100 to -200°C (J, K, T, and E)

Thermocouples: R, S, and B, better than $\pm 0.1^\circ\text{C} \pm 0.15\%$ of range

Linearization: $\pm 0.05^\circ\text{C}$

Pt100 Range: Better than $\pm 0.05^\circ\text{C} \pm 0.1\%$ of range

Zero Drift: $\pm 0.01\%$ of span per °C

Span Drift: $\pm 0.01\%$ of span per °C

Display: LCD, backlight

Display Resolution: Thermocouple ranges 0.1°C, Pt100 range 0.01°C

User Interface: Front panel key for channel number or auto-scan selection; PC software for all other functions

Indication: Channel number, measured temperature (°C or °F)

Reference Junction: Automatic, accurate reference

Self Calibration: User facility incorporated; the instrument auto-calibrates on every A/D cycle

Sensor: Open circuit upscale indication, detection and indication (independent alarms should be used for process safety if required)

Ambient Operating Temperature: 0 to 50°C (32 to 122°F)

Storage Temperature: -20 to 70°C (-4 to 158°F)

Input Terminations: 8 x thermocouple, mini connectors

Terminal Blocks: 8 x Pt100

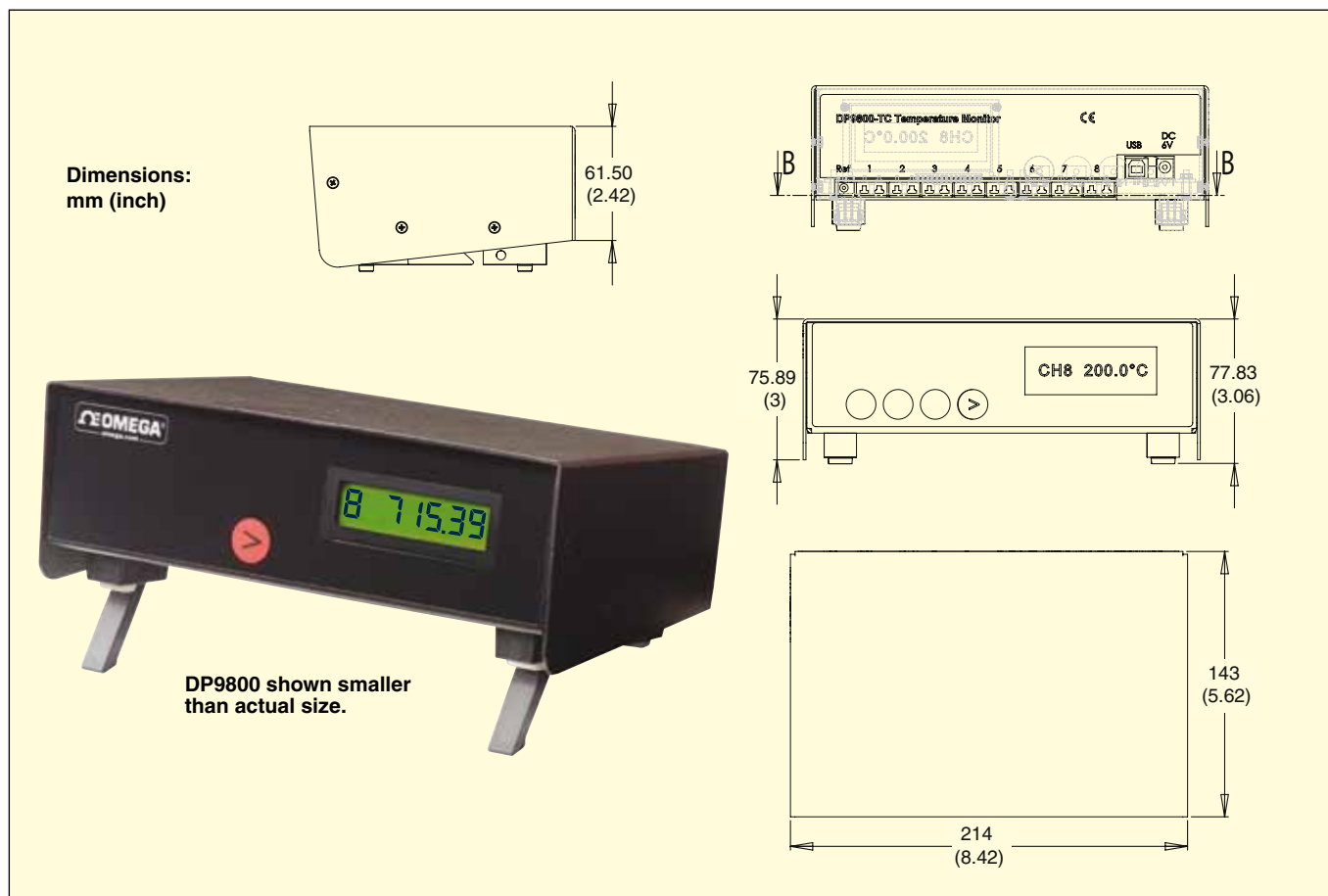
PC Interface: USB

Power Supply: 6 Vdc (5.5 to 9.0V) via universal mains adaptor (supplied), 120 to 250V, 50/60 Hz

Logging Interval: 5 second to 1 hour



DP9800, rear view, shown smaller than actual size.



To Order Visit omega.com/dp9800 for Pricing and Details

Model No.	Description
DP9800-TC	8-channel thermocouple digital thermometer/data logger with USB
DP9800-RTD	8-channel RTD digital thermometer/data logger with USB

Comes complete with power adaptor, USB cable, software and operator's manual (on CD).

Ordering Examples: DP9800-TC, 8-channel thermocouple digital thermometer/data logger.

OCW-3, OMEGACARESM extends standard 2-year warranty to a total of 5 years.