



# CEM DT-612 Digital Thermometer Owner's Manual

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**CEM DT-612 Digital Thermometer**



## INTRODUCTION

This instrument is a portable 3 1/2 digit, compact-sized digital thermometer designed to use an external K-type thermocouple as a temperature sensor. Temperature indication follows National Bureau of Standards and IEC584 temperature/voltage tables for K-type thermocouples. Two K-type thermocouples are supplied with the thermometer.



**DT-612**

## **DIGITAL THERMOMETER**

- User Selectable Temperature Scales
- User Selectable Resolution
- Uses K type Thermocouple
- Dual Thermocouple input
- Wide variety of interchangeable thermocouple probes
- Max Hold / Data Hold
- Differential Temperature ( $T_1 - T_2$ )
- SCAN Function ( $T_1$ ,  $T_2$ ,  $T_1 - T_2$ , MAX. HOLD ... )
- Backlit LCD Display

## **Electrical Specifications**



## Temperature Scale

- Celsius (°C), Fahrenheit (°F) user-selectable
- Measurement Range : -50°C to 1300°C, -58°F to 2000°F
- Resolution : 1°C or 1°F, 0.1°C or 0.1°F
- Accuracy: Accuracy is specified for operating temperatures over the range of 18°C to 28°C (64°F to 82°F), for 1 year, not including thermocouple error
- $\pm 2^{\circ}\text{C}$  ..... -50°C to 0°C
- $\pm 4^{\circ}\text{F}$  ..... -58°F to 32°F
- $\pm(0.5\% \text{ rdg} + 1^{\circ}\text{C})$  ..... 0°C to 1000°C
- $\pm(0.8\% \text{ rdg} + 1^{\circ}\text{C})$  ..... 1000°C to 1300°C
- $\pm(0.5\% \text{ rdg} + 2^{\circ}\text{F})$  ..... 32°F to 2000°F
- Temperature Coefficient : 0.1 times the applicable accuracy specification per °C from 0°C to 18°C and 28°C to 50°C (32°F to 64°F and 82°F to 122°F)
- Input protection: 60V DC or 24V rms AC maximum input voltage on any combination of input pins
- Reading Rate: 2.5 times per second
- Input Connector: Accepts standard miniature thermocouple connectors (flat blades spaced 7.9mm, center to center)

## Environmental Specifications



- **Ambient Operating Range** : 0°C to 50°C (32°F to 122°F)
- **Storage Temperature** : -20°C to 60°C (-4°F to 140°F)
- **Relative Humidity** : 0% to 80% (0°C to 35°C) (32°F to 95°F) 0% to 70% (35°C to 50°C) (95°F to 122°F)

## General Specifications

- **Display**: 3 1/2 digit Backlit liquid crystal display (LCD) with a maximum reading of 1999
- **Battery**: Standard 9V battery (NEDA 1604, IEC 6F22)
- **Dimensions** : 162mm (H)×76mm(W)×38.5mm(D)
- **Weight**: 210g
- **Supplied Probe**: Type "K" thermocouple bead probe (Teflon tape insulated). Maximum insulation temperature 260°C (500°F) Probe accuracy  $\pm 2.2^{\circ}\text{C}$  or  $\pm 0.75\%$  of reading (Whichever is greater) from 0° to 800°C.

Accessories

Battery, Holster with stand, K type Bead Probe, Carrying Case, Instruction Manual.

Documents / Resources

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|  | <p><a href="#">CEM DT-612 Digital Thermometer</a> [pdf] Owner's Manual<br/>DT-612 Digital Thermometer, DT-612, Digital Thermometer, Thermometer</p> |
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