



#### Digital Thermometer DT-612

The CEM DT-610B/DT-612 Digital Thermometers are portable hand held and compact meters designed to use an external K type thermocouple as a temperature sensor. Temperature indication follows N.I.S.T and I.E.C. 584 temperature/voltage tables for K type thermocouples. They have user selectable °C/°F/K scales and resolution of 0.1/1 °C/°F/K.

3-1/2 Digits Backlit LCD Display

9V Battery Operated

User Selectable °C/°F/K scales

Type K input thermometers

dual input

Differential Temperature T1-T2 can be measured

Electronic Offset function allows compensation of thermocouple errors to maximise overall accuracy.

Auto Power Off Mode

Max Hold and Data Hold

#### Electrical Specifications

Temperature Scale	Celsius (°C), Fahrenheit (°F) user-selectble
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 is specified for operating temperatures over the range of 18°C to 28°C
	±2°C ..... -50°C to 0°C
	±4°F ..... -58°F to 32°F
Accuracy	±(0.5% rdg+1°C) ..... 0°C to 1000°C
	±(0.8% rdg+1°C) ..... 1000°C to 1300°C
	±(0.5% rdg+2°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
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)
	0% to 80% (0°C to 35°C) (32°F to 95°F)
Relative Humidity	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 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 ±2.2°C or ±0.75% of reading (Whichever is greater) from 0° to 800°