

This instrument is a portable 31/2 digit, compact-sized digital thermometer designed to use external K-type thermocouple as temperature sensor. Temperature indication follows National Bureau of Standards and IEC584 temperature/voltage tables for K-type thermocouples. One K-type thermocouples is supplied with the thermometer.





## **DT-610B** DIGITAL THERMOMETER

- I Hand Held Battery operated
- I Backlit LCD Display
- I Measures Temperature in °C/°F & K Scales
- Resolution selectable as 0.1°/1°
- I Thermocouple check facility
- I Max and Data Hold facility
- I Confirms to CE standards

# DT-610B Digital Thermometer

### **Electrical Specifications**

Temperature Scale	Celsius (°C), Fahrenheit (°F) or Kelvin (K) user-selectable	
Measurement Range	-50°C to 1300°C, -58°F to 2000°F, 223K to 2000K	
Resolution	1°C or 1°F, 0.1°C or 0.1°F,1 K	
Accuracy	Accuracy is specified for operating temperatures over the range of 18°C to 28°C (64°F to 82°F), for I year, not including thermocouple error	
	±2°C50°C to 0°C	
	±4°F58°F to 32°F	
	±5K 223K to 273K	
	±(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	
	±(1.0% rdg+2K) 273Kto 2000K	
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)
Deletive Uppeidity	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	31/2 Backlit digit 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	4 foot Type"K" thermocouple bead probe (Teflon tape insulated)	
	Maximum insulation temperature 260°C (500°F)	
Probe accuracy $\pm 2.2^{\circ}$ C or $\pm 0.75\%$ of reading (Whichever is greater) from 0°to 800°C		

#### Accessories

Temperature Probe, Holster, Carrying Case, Battery and Test Certificate.