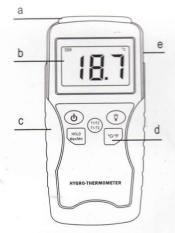
# Digital Thermometer

## Instruction Manual





**CE Certification** This instrument certified to the following standard: EN 61010-1 General Safety



PLEASE RECYCLE

This instrument is certified to the standard EN61326, and applies to measure the temperature with K type thermocouple. Be sure read this manual carefully before use it, and keep the manual for later use.

#### Warranty

This instrument is guaranteed one year after the date of purchase, however, the warranty does not cover disposable batteries or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling.

#### Safety

Make sure follow the safety instructions when use the instrument to avoid any damage or dangerous.

- 1) Check the housing and accessories, if the instrument is broken, please don't use it.
- 2) Unplug the thermocouple before switch the device on.
- 3) Do not use it with explosive material.
- 4) Do not use it exceeds the specified voltage.
- 5) Be sure there is no potential difference between the two routes when use DT821A,if the potential difference is unavoidable, please choose insulated thermocouples.
- 6) Do not use the instrument when the housing is taken apart.
- 7) If the instrument works abnormally, send it back for repair.

2. Parameters			
Model	DT821	DT821A	
Input	T1	T1-T2	
Measuring Range	-200 to +1300°C (-328 to 2372°F)	-50 to 1300°C (-50 to 2372°F)	
Resolution	0.1°C/°F (<1000°C/°F); 1°C/°F (>= 1000°C/°F)		
Accuracy	± ( 0.39	± ( 0.3%+1°C )	
Sampling rate	50tir	50times/s	
Power 1x9.0V (6F22)		(6F22)	
Operation tempera	ture 0°C to	) +50°C	
Operation humidity	10% to	10% to 90%RH	
Storage temperatur	re -10℃ t	-10°C to +60°C	
Storage humidity	30% to	30% to 75%RH	
Weight	220g (batte	220g (batteries included )	

Standard accessory:carrying case, manual, K type thermocouple (TP-01), batteries Note: The accuracy is guaranteed at the following condition: ambient temperature 18°C-28°C (60°F-82°F)

### 3. Description

## Structure:

a Sensor

- b. Screen
- c. Protective Cover
- d. Buttons
- e. Battery compartment
- Display:
- a. Temperature
- b. Hold the current reading
- c. The Max/Min value
- d. T1 temperature (Only DT821A)
- e. T2 temperature (Only DT821A)
  - f. T1 and T2 temperature difference value (Only DT821A)
  - g. Temperature measurement unit
  - h. Power indicate

## 4. Buttons

## [6] :Switch the device on or off

Switch on: Put in battery, press the button, it displays fully, and quickly be ready for measurement Switch off: Automatically goes off after 10mins inaction; or by pressing the button.

[ ] :Backlight: Switch on or off the backlight

Press the button to switch the backlight on or off, it goes off automatically after 10s inaction ( use it the less, the more battery power saved.)

[HOLD/MAX/MIN] : Hold the current reading

Press it to freeze the current reading, press it again to display the Max value, press the third time, it displays the Min value, then back to the measuring mode.

[°C/°F]: Switch between °C and °F

[T1/T2/T1-T2]: Switch the value between T1, T2, and T1-T2 (only for DT821A)

## 5. Operation guide

- 1) Switch the  $\mathbf{0}$  device on
- 2) Connect the temperature probe
- 3) Choose a temperature unit
- 4) Put the probe tip on the surface of the measured subject
- 5) Read the value on the screen.

### Warning!

To avoid electrical shock,do not use this instrument when voltages exceeding 24V AC or 60V DC while the probe tip is electrically connected to the output terminals.

It displays"1"if any of the following conditions occur:

- 1) No thermocouple is plugged into the thermocouple input connector
- 2) The thermocouple connected to the input is broken or open-circuited.

⚠ If the device won't be used for a long time, please take the battery out, in case the leakage cause damage to the device.

## 6. Battery replacement

To maintain the measurement accuracy, please replace the battery when the low battery indicator is displayed on the screen.

How to replace battery:

Switch the device off, unplug the thermocouple

Take off the protective cover carefully

Unscrew the battery cover on the back of the device

Replace it with new 9V 6F22 battery

Put back the battery cover, and the protective cover.

### 7. Maintenance

Clean the surface of the device with a wet cloth or household cleaner.

Do not use any corrosive liquid on the device.