

# THERMOMETER CALIBRATOR

Model : TC-424

*ISO-9001, CE, IEC1010*



**Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

# THERMOMETER CALIBRATOR

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## FEATURES

- \* Four kinds Source output :
  1. Pt-100 source, 2. Voltage( DC mV) source,
  3. 400 ohm source, 4. Type K/J/R/E/T/S Temp. source
- \* Four kinds measurement :
  1. Pt-100 measure, 2. Voltage( DC mV) measure,
  3. 400 ohm measure, 4. Type K/J/R/E/T/S Temp. measure.
- \* Portable instrument for calibrating process devices.
- \* Four kinds Source Adjustable output.

## GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 52 mm x 38 mm LCD with green backlight ( ON/OFF ).
Measurement	1.Type k/J/R/E/T/S Temp. , 2. Voltage (DC mV) 3. Pt-100 ohm Temp. 4. 400 ohm.
Source	Type k/J/R/E/T/S Temp. , Voltage ( DC mV : - 200.0 to + 200.0 mV ) Pt-100 ohm Temp. 400 ohm.
Sampling Time of Display	Approx. 1 second.
Advanced setting	* Auto power OFF management. * Set unit °C or °F .
Operating Temperature and Humidity	0 to 50 °C . Less than 85% R.H.
Power Supply	* Alkaline or heavy duty DC 1.5 V battery ( UM3, AA ) x 6 PCs, or equivalent. * DC 9V adapter input. ( AC/DC power adapter is optional ).
Power Current	* Normal operation ( w/o current source ) : Approx. DC 15 mA. * LCD Backlight is ON : Approx. increase DC 5 mA. * Current source ( under 10 mA signal out put ) : Approx. DC 33 mA. * LCD Backlight is ON : Approx. increase DC 5 mA.
Weight	Meter : 277 g/ 0.61 LB.
Dimension	Meter : 178 x 68 x 47.5 mm
Accessories Included	* Instruction manual.....1 PC * Hard carrying case( CA-06 ).....1 PC * Type K source output cable, AC-DUK02..... 1 PC
Optional Accessories	* AC to DC 9V adapter. * Type K Temp. probe : TP-01, TP-02A, TP-03, TP-04, TP-05.

## ELECTRICAL SPECIFICATIONS (23.5 °C)

### Thermocouple

Thermocouple			
Type	Range of source / measure	Resolution	Accuracy
K	-200.0 to 1370.0 °C	0.1 degree	± (0.25 %FS+1d)
	-325 to 2498 °F		± (0.5 %FS+1d)
J	-200.0 to 1200.0 °C	0.1 degree	± (0.25 %FS+1d)
	-325 to 2192 °F		± (0.5 %FS+1d)
R	-0 to 1768 °C	1 degree	± (0.25 %FS+1d)
	-325 to 3214 °F		± (0.5 %FS+1d)
E	-200.0 to 1000.0 °C	0.1 degree	± (0.25 %FS+1d)
	-325 to 1832 °F		± (0.5 %FS+1d)
T	-200.0 to 400.0 °C	0.1 degree	± (0.25 %FS+1d)
	-325 to 752 °F		± (0.5 %FS+1d)
S	-0 to 1768 °C	1 degree	± (0.25 %FS+1d)
	-325 to 3214 °F		± (0.5 %FS+1d)

\* input impedance : 10<sup>12</sup> ohms.  
\* input protection : DC 60 V, AC 24 V ( <1 minute )

### DC Voltage

DC Voltage		
Range of source / measure	Display Resolution	Accuracy
-10.00mV to +110.00 mV	0.01 mV	± ( 0.05 %FS+30d)

\* input impedance :10<sup>12</sup> ohms.  
\* input protection : DC 60 V, AC 24 V ( <1 minute )

### Pt100

Pt100		
Range of source / measure	Display Resolution	Accuracy
-200.0 to 850.0 °C	0.1 degree	± ( 0.05 %FS+1d)
-328.0 to 1562.0 °F	0.1 degree	± ( 0.05 %FS+1d)

\* input impedance :10<sup>12</sup> ohms.  
\* input protection : DC 60 V, AC 24 V ( <1 minute )

### 400 ohm

400 ohm source		
Range of source / measure	Display Resolution	Accuracy
400.0 ohm	0.1 ohm	± ( 0.25 %FS+1d)

\* FS : full scale

\* Appearance and specifications listed in this brochure are subject to change without notice.