

Multi-functions

THERMOMETER CALIBRATOR source & measurement

Model : TC-424

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

The Art of Measurement

THERMOMETER CALIBRATOR

source & measurement

Model : TC-424

FEATURES

* Four kinds Source output : 1. Pt-100 source, 2. Voltage(DC mV) source. 3. 400 ohm source , 4. Type KJRETS Temp. source .
* Four kinds measurement inputer : 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 30 mm. LCD with white backlight (ON/OFF).
Measurement	1.Type K/J/R/E/T/S Temp. , 2. Voltage (DC mV). 3. Pt-100 ohm, 4. 400 ohm .
Source	Type K/J/R/E/T/S Temp., Voltage (DC mV) : - 10.00 to + 110.00 mV), Pt-100 ohm , 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 18 mA. LCD Backlight is ON) : Approx. + DC 2 mA.
Weight	Meter : 282 g/ 0.61 LB. (with cable)
Dimension	Meter : 198 x 68 x 45 mm
Accessories Included	* Instruction manual..... 1 PC * Hard carrying case(CA-06)..... 1 PC * (Type K source output line), AC-DUK02... 1 PC * MTL-CP424..... 1 PC
Optional Accessories	AC to DC 9V adapter. TP-01,TP-02A, TP-03, TP-04, TP-05

Electrical Specifications (23.0 ± 5 °C)

Thermocouple

Type	Range of source / measure	Accuracy		Resolution
		source	measure	
K	-200.0to 1370.0 °C	>-100°C: ±(0.05 % + 1 °C)	>-100°C: ±(0.07%+1.5°C)	0.1 °C/°F
	-328 to 2498 °F	±(0.05 % + 1.8 °F)	±(0.07%+2.7°F)	
J	-200.0 to 1200.0 °C	<-100°C: ±(0.05 % + 2 °C)	<-100°C: ±(0.07%+ 2 °C)	0.1 °C/°F
	-328 to 2192 °F	±(0.05 % + 3.6 °F)	±(0.07%+ 3.6 °F)	
T	-200.0 to 400.0 °C	<100°C:±(0.05% +3°C or 5.4°F)	<100°C:±(0.07% +3°C or 5.4°F)	1 °C/ °F
	-328 to 752 °F	≥100°C:±(0.05% +2°C or 3.6°F)	≥100°C:±(0.07% +2°C or 3.6°F)	
E	-200.0 to 1000.0 °C			1 °C/ °F
	-328 to 1832 °F			
R	0 to 1768 °C			
S	32 to 3214 °F			

* input impedance : 10¹² ohms.
* measure protection : DC 60 V , AC 24 V.
* source protection : Reference CAUTION.

DC Voltage

Range of source / measure	Display	Accuracy
	Resolution	source / measure
-10.00mV to +110.00 mV	0.01 mV	± (0.05 % + 0.03mV)

* input impedance : 10¹² ohms.
* measure protection : DC 60 V , AC 24 V.
* source protection : Reference CAUTION.

Pt100

Range of source / measure	Display Resolution	Accuracy	
		source	measure
-200.0 to 850.0 °C	0.1 degree	±(0.05%+0.6°C)	±(0.05%+ 1°C)
-328.0 to 1562.0 °F	0.1 degree	±(0.05%+1.1°F)	±(0.05%+ 1.8°F)

* input impedance : 10¹² ohms.
* protection : Reference CAUTION.

Remark :

The above specification are tested under the environment
RF Field Strength less than 3 V/M & frequency less than the
30 MHz only.

400 Ω

Range of source / measure	Display Resolution	Accuracy:	
		source	measure
400.0 Ω	0.1 Ω	±(0.1%+ 0.4 Ω)	±(0.1%+ 0.6Ω)

* input impedance : 10¹² ohms.
* protection : Reference CAUTION.
* FS : full scale

Remark :

The above specification are tested under the environment
RF Field Strength less than 3 V/M & frequency less than the
30 MHz only.



* Do not apply a voltage exceeding the maximum input voltage.
otherwise the input part may be damaged.
* Do not short_circuit or apply an external voltage to output terminals
of the instrument or standard equipment, or else their internal circuitry
may be damaged.