

Multi-functions , source & measurement

THERMOMETER CALIBRATOR

Model : TC-424

ISO-9001, CE, IEC1010

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02-2389-0101



Lutron

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The Art of Measurement

Multi-functions › source & measurement

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FEATURE

*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 SPECIFICATION

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± 5 °C)

DC Voltage

DC Voltage		
Range of source / measure	Display Resolution	Accuracy source / measure
-10.00mV to +110.00 mV	0.01 mV	± (0.05 % + 0.03mV)
<i>·input impedance : 10 ^12 ohms.</i> <i>·measure protection : DC 60 V , AC 24 V.</i> <i>·source protection : Reference CAUTION.</i>		

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			
J	-200.0 to 1200.0 °C	±(0.05 %+ 1.8 °F)	±(0.07%+2.7°F)	
	-328 to 2192 °F	<-100°C : ±(0.05 %+ 2 °C)	<-100°C : ±(0.07%+ 2 °C)	
T	-200.0 to 400.0°C	±(0.05 %+ 3.6 °F)	±(0.07%+ 3.6 °F)	
	-328 to 752 °F			
E	-200.0 to 1000.0 °C			
	-328 to 1832 °F			
R	0 to 1768 °C	<100°C : ±(0.05% +3°C or 5.4°F)	<100°C : ±(0.07% +3°C or 5.4°F)	1 °C / °F
S	32 to 3214 °F	≥ 100°C : ±(0.05% +2°C or 3.6°F)	≥ 100°C : ±(0.07% +2°C or 3.6°F)	
<i>input impedance : 10 ^12 ohms.</i> <i>measure protection : DC 60 V , AC 24 V.</i> <i>* source protection : Reference CAUTION.</i>				

Pt100

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)
<i>·input impedance : 10 ^12 ohms.</i> <i>·protection : Reference CAUTION.</i>			

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%+ 0.4Ω)	±(0.1%+ 0.6Ω)
<i>·input impedance : 10 ^12 ohms.</i> <i>·protection : Reference CAUTION.</i> <i>·FS : full scale</i>			

Remark :

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

CAUTION

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

TC-424+1803

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