0.1 degree + type K, red laser guide
INFRARED THERMOMETER
Model : TM-909AL   *ISO-9001, CE, IEC1010*

FEATURES

* 2 in 1, Infrared thermometer + Type K thermometer.
* Infrared thermometer, non-contact temperature measurement, -20 to 400 ℃ (-4 to 752 ℉).
* Type K thermometer , range : -100.0 to 1300.0 ℃ -148.0 to 2372.0 ℉.
* 0.1 ℃ display resolution both for the measurement of IR thermometer and Type K thermometer.
* Microcomputer circuit with high performance.
* Auto power shut off saves battery life.
* Wide temperature measuring range.
* Build in ℃ & ℉ select button.
* Data hold.
* Memory function to record the maximum & minimum reading.
* Build the REL button, useful for relative measurement.
* Emissivity adjustment.
* Red laser target light guide, < 1 mW.
* Heavy duty & compact housing case.

LUTRON ELECTRONIC

The Art of Measurement

0.1 degree + Type K THERMOMETER, Red laser target , Emissivity adjustment

INFRARED THERMOMETER

Model : TM-909AL

FEATURES	
* 2 in 1, Infrared thermometer + Type K thermometer.	* Build the REL button, useful for relative measurement.
* Infrared thermometer, non-contact temperature measurement, -20 ℃ to 400 ℃ (-4 ℉ to 752 ℉).	* Sensor select button on the front panel, easy to change different type probe.
* Microcomputer circuit with high performance.	* Emissivity adjustment for IR thermometer.
* Wide temperature measuring range.	* Red laser target light guide for IR thermometer.
* 0.1 ℃ display resolution both for the measurement of IR thermometer and Type K thermometer.	* RS 232 data output, easy cooperate with computer.
	* Optional data acquisition software for data record.
* Build in ℃ & ℉ select button on the front panel.	* Auto power shut off saves battery life.
* Data hold function.	* Built-in low battery indicator.
* Memory function to record the maximum & minimum reading with recall.	* Heavy duty & compact housing case with stand.
	* Operates from 006P DC 9V battery.

GENERAL SPECIFICATIONS			
Display	Dual display with annunciator : * Main display : 10 mm (0.4") LCD, 5 digit. * Small display : To show the emissivity value.	Power Supply	Alkaline or heavy duty type, DC 9V battery, 006P, MN1604 (PP3) or equivalent.
Sensor Type	1. Infrared thermometer (Non contact temperature measurement)	Power Consumption	Approx. DC 12 mA (w/o tagret light on). Approx. DC 23 mA (with target light on).
	2. Type K thermometer		* Above consumption value is calculated under the function of IR thermometer.
Functions	℃, ℉, Data hold, Memory (Max., Min.), Relative measurement, Emissivity adjustment (IR thermometer).	Operating Temperature	0 to 50 ℃ (32 to 122 ℉).
Resolution	0.1 degree.	Operating Humidity	Less than 80% RH.
Circuit	Exclusive microcomputer circuit, the software build in linearity correction instead the traditional hardware circuit.	Weight	260 g/0.57 LB.
		Dimension	195 x 120 x 57 mm. (7.7 x 4.7 x 2.2 inch).
Emissivity Adjustment	Range : 0.20 to 1.00. Adjustment by pushing button on front panel.	Standard Accessory	Operational manual..... 1 PC.
Target Guide	Red color, laser power less than 1 mW.	Optional & accessories	Hard carrying case Model : CA-06
Probe Input Socket	Standard 2 pin thermocouple socket.		USB cable Model : USB-01
Sampling Time	Approx. 1 second.		RS232 cable Model : UPCB-02
Hold Function	To freeze the display reading value.		
Memory Recall	Memorize the Maximum, Minimum reading with recall.		Type K thermocouple probe. TP-01, TP-02A. TP-03, TP-04
Offset Adjustment	Available for thermocouple thermometer offset adjustment by pushing button on front panel.		Data acquisition software Model : SW-U801-WIN
Over Indication	Show " - - - - ".		
Data Output	RS232 PC serial interface.		

ELECTRICAL SPECIFICATIONS (23 ± 5 ℃)

A. Infrared Thermometer

Resolution/ ranges	0.1℃	- 20 ℃ to 400 ℃
	0.1 ℉	-4 ℉ to 752 ℉
Accuracy	± 3 % of reading or ± 3℃ (5 ℉), which ever is greater. 1. Accuracy test under the measurement range within - 10 ℃ to 350 ℃ . 2. Meter operating temp. within 23 5 ℃ and the emissivity value of measurement target set to 0.95. 3. Spec. tested under the 20 cm dia. black body, the measuring distance from the probe sensing Head is 30 cm.	
Temp. Sensor	Thermocouple pie.	
Emissivity	By push button. Setting range : 0.20 to 1.00. The default emissivity value is 0.95, which will cover 90% of a typical application.	
Measurement Wave length Region	6 to 12 micro meter.	
Distance Factor	D/S : Approx. 7:1. * D - Distance, S - Spot.	

B. Type K Thermometer

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 ℃	-100.0 to 1300.0 ℃	± (1 % + 1 ℃)
	0.1 ℉	-148.0 to 2372.0 ℉	± (1 % + 2 ℉)

Remark :
a. Accuracy value is specified for the meter only.
b. Accuracy test is based on the environment temperature of 23 ± 5℃.
c. Linearity Correction : Memorize the thermocouple's curve into the CPU circuit.

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