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

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw





### **FEATURES**

- \* 2 in 1, Infrared thermometer + Type K thermometer.
- \* Infrared thermometer, non-contact temperature measurement, -20 to 400  $^{\circ}C$  (-4 to 752  $^{\circ}F$ ).
- \* Type K thermometer , range : -100.0 to 1300.0 °C -148.0 to 2372.0 °F.
- \* 0.1 °C 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  $^{\circ}C$  &  $^{\circ}F$  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.



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	<ul> <li>Sensor select button on the front panel, easy to change</li> </ul>				
measurement, -20 $^\circ$ C to 400 $^\circ$ C ( -4 $^\circ$ F to 752 $^\circ$ F ).	different type probe.				
* Microcomputer circuit with high performance.	<ul> <li>Emissivity adjustment for IR thermometer.</li> </ul>				
* Wide temperature measuring range.	* Red laser target light guide for IR thermometer.				
* 0.1 °C display resolution both for the measurement	* RS 232 data output, easy cooperate with computer.				
of IR thermometer and Type K thermometer.	* Optional data acquisition software for data record.				
* Build in $^{\circ}C$ & $^{\circ}F$ 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	* Heavy duty & compact housing case with stand.				
reading with recall.	* Operates from 006P DC 9V battery.				

#### **GENERAL SPECIFICATIONS**

	OLNERAL SI E	ULICATION		
Display	Dual display with annunciator :	<b>Over Indication</b>	Show " ".	
N.100	* Main display : 10 mm (0.4") LCD, 5 digit.	Data Output	RS232 PC serial interface.	
	* Small display : To show the emissivity value.	Power Supply	Alkaline or heavy duty type,	
Sensor	1. Infrared thermometer	No.	DC 9V battery, 006P, MN1604 (PP3)	
Туре	(Non contact temperature measurement)	-OM.	or equivalent.	
	2. Type K thermometer	Power	Approx. DC 12 mA ( w/o tagret light on ).	
Functions	°C, °F, Data hold, Memory (Max., Min.),	Consumption	Approx. DC 23 mA ( with target light on ).	
	Relative measurement,		* Above consumption value is calculated under	
	Emissivity adjustment (IR thermometer).	V.COmm	the function of IR thermometer.	
Resolution	0.1 degree.	Operating Temperature	0 to 50 ℃ (32 to 122 °F).	
Circuit	Exclusive microcomputer circuit, the software build in linearity correction		WT. MM 100Y. CONTY	
		Operating	Less than 80% RH.	
	instead the traditional hardware circuit.	Humidity	I'V W 1001. ON.I'	
Emissivity	Range : 0.20 to 1.00.	Weight	260 g/0.57 LB.	
Adjustment	Adjustment by pushing button on front panel.	Dimension	195 x 120 x 57 mm.	
Target Guide <	Red color, laser power less than 1 mW.	1001.00	(7.7 x 4.7 x 2.2 inch).	
Probe Input	Standard 2 pin thermocouple socket.	Standard	Operational manual 1 PC.	
Socket	NT 100X. TN NT	Accessory	MIT WILLOUT COM.	
Sampling Time	Approx. 1 second.	Optional	Hard carrying case	
Hold Function	To freeze the display reading value.	& accessories	Model : CA-06	
Memory Recall	Memorize the Maximum, Minimum	WW.100Y.	RS232 cable	
	reading with recall.		Model : UPCB-02	
Offset	Available for thermocouple thermometer offset	100 x	Application software, windows version.	
Adjustment	adjustment by pushing button on front panel.	WWW.	Model : SW-U801-WIN	

		ELECTRICAL SP	ECIFICATIONS (23 ±	5 ℃)	
A. Infrared The	ermometer	and Comments	NNN	Marken Marken Street	
Resolution/	0.1℃  - 20 ℃ to 400 ℃				
ranges	0.1 °F -4 °F 1	to 752 °F	N N 100	I. TW WI TOUT	
Accuracy	$\pm$ 3 % of reading or $\pm$ 3°C (5 °F), which ever is greater.				
5	1. Accuracy test under the measurement range within - 10 $\mathcal C$ to 350 $\mathcal C$ .				
	2. Meter ope	erating temp. within 2	3 5 $^\circ\!\!\!C$ and the emissivity value	ue of measurement target set to 0.95.	
	3. Spec. test	ted under the 20 cm a	lia. black body, the measuring	g distance from the probe sensing Head	
	is 30 cm.		NTN WITH	1001.0 MILING VIL	
Temp. Sensor	Thermocouple pie.				
Emissivity	By push button	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	6 to 12 micro n	neter.		N.10.	
Wave length					
Region	ATWW. P. COMP. TW				
Distance Factor	D/S : Approx. 7:1. * D - Distance, S - Spot.				
B. Type K Ther	mometer	COL. WW		the left is and a presented	
Sensor Type	Resolution	Range	Accuracy	勝特力材料 886-3-5753170	
Туре К	0.1 °C	-100.0 to 1300.0	°C ± (1% + 1°C)	胜特力电子(上海) 86-21-34970699	
	0.1 °F	-148.0 to 2372.0	<sup>°</sup> F ± (1% + 2 <sup>°</sup> F)	胜特力电子(深圳) 86-755-8329878	
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Remark :

a. Accuracy value is specified for the meter only.

b. Accuracy test is based on the environment temperature of  $23 \pm 5$ °C.

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.

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