## INFRARED THERMOMETER

Model: TM-939 *ISO-9001, CE, IEC1010* 







## High Temp. + Type K/J/R/E/T Infrared THERMOMETER

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FEATURES					
* -20 °C to 650 °C Wide range IR temperature measurement.	* Data hold function for stored the desired value on display.				
* Infrared thermometer, non-contact temperature	* Memory function to record the maximum & minimum				
measurement, -20 $^{\circ}\mathrm{C}$ to 650 $^{\circ}\mathrm{C}$ ( -4 $^{\circ}\mathrm{F}$ to 1202 $^{\circ}\mathrm{F}$ ),	reading with recall.				
precision for none contact temperature measurement.	* Build the REL button, useful for relative measurement.				
* Emissivity adjustment for IR thermometer.	* Sensor select button on the front panel, easy to change				
* Laser guide for IR thermometer.	different type probe.				
* 2 in 1, Infrared thermometer + Thermocouple ( Type	* RS 232 data output, easy cooperate with computer.				
K/J/T/E/R ) thermometer.	* Optional data acquisition software for data record.				
* Thermocouple probe accepts 5 different types : type K,	* Auto power shut off saves battery life.				
type J, type T, type E, type R.	* Built-in low battery indicator.				
* Microcomputer circuit with high performance.	* Heavy duty & compact housing case with stand.				
* Build in °C & °F select button on the front panel.	* 006P DC 9V battery poer supply.				

GENERAL SPECIFICATIONS					
Display	51 mm x 32 mm supper large LCD	Memory Recall	Memorize the Maximum, Minimum		
	display, 15 mm (0.6") digit size.		reading with recall.		
		Offset	For thermocouple thermometer offset		
Measurement	Infrared thermometer	Adjustment	adjustment by pushing button on front panel.		
	( Non contact temperature measurement )	Over Indication	Show " ".		
	2. Thermocouple probe, type K/J/T/E/R	Data Output	RS232 PC serial interface.		
Functions	°C, °F, Data hold, Memory (Max., Min.),	Power Supply	Alkaline or heavy duty type,		
	Relative measurement,		DC 9V battery, 006P, MN1604 ( PP3 )		
	Emissivity adjustment (IR thermometer).		or equivalent.		
Resolution	1 degree or 0.1 degree.	Power	Approx. DC 10 mA ( laser guide off ).		
Circuit	Exclusive microcomputer circuit, the	Consumption	Approx. DC 19 mA ( with laser light on ).		
	software build in linearity correction		* Above consumption value is caculated		
	instead the traditional hardware circuit.		under the function of IR thermometer.		
IR Emissivity	Range: 0.20 to 1.00.	Operating	0 to 50 °C (32 to 122 °F).		
Adjustment	Adjustment by pushing button on front panel.	Temperature			
IR Sensor	Thermocouple pie.	Operating	Less than 80% RH.		
IR Measure	6 to 12 micro meter.	Humidity			
Wave Length		Weight	220 g/0.48 LB.		
Region		Dimension	HWD 220 x 68 x 30 mm ( 8.7 x 2.7 x 1.2 inch ).		
IR	D/S ratio: Approx. 7:1.	Standard	Operational manual1 PC.		
	* D - Distance, S - Spot.	Accessory			
Laser Guide	Red laser light, less than 1 mW,	Optional	* Temperature probe :		
	Meet EN60825	accessories &	TP-01, TP-02A, TP-03, TP-04		
Probe Input	Thermocouple probe :	temp. probe	* Carrying case, Model: CA-06, CA-03		
Socket	Standard 2 pin thermocouple socket.		* RS232 cable, Model: UPCB-02		
Sampling Time	Approx. 1 second.		* USB cable, Model : USB-01		
Hold Function	To freeze the display reading value.		* Application software, windows version.		
			Model: SW-U801-WIN		

MEASURING RANGE/ RESOLUTION							
Туре	Reso-	Range	Accuracy	Туре	Reso-	Range	Accuracy
	lution				lution		
Infrared	1 ℃	- 20 °C to 650 °C	- 20°C to 400°C :	Thermocouple	0.1 ℃	-100.0 to -50.0 ℃	± (0.2%+1°C)
thermometer	1 °F	-4 °F to 1202 °F	± 3% of reading	type T	0.1 ℃	-49.9 to 400.0 ℃	± (0.2%+0.5°C)
			or $\pm$ 3 $^{\circ}$ C (5 $^{\circ}$ F)		0.1 °F	-148.0 to -58.0 °F	± (0.2%+1.8°F)
			> 400 °C :		0.1 °F	-57.9 to 752.0 °F	± (0.2%+1°F)
			± 3% of reading	Thermocouple	0.1 ℃	-100.0 to -50.0 ℃	± (0.2%+1.3°C)
Thermocouple	0.1 ℃	-100.0 to -50.0 ℃	± (0.2%+1°C)	type E	0.1 ℃	-49.9 to 900.0 ℃	± (0.2%+0.8℃)
type K	0.1 ℃	-49.9 to 1300.0 ℃	± (0.2%+0.5°C)		0.1 °F	-148.0 to -58.0 °F	± (0.2%+2.8°F)
	0.1 °F	-148.0 to -58.0 °F	± (0.2%+1.8°F)		0.1 °F	-57.9 to 1652.0 °F	± (0.2%+2°F)
	0.1 °F	-57.9 to 2372.0 °F	± (0.2%+1°F)	Thermocouple	1 ℃	0 to 600 ℃	± (1 %+5°C)
Thermocouple	0.1 ℃	-100.0 to -50.0 ℃	± (0.2%+1°C)	type R		601 to 1700 ℃	± (1.5%+5°C)
type J	0.1 ℃	-49.9 to 1150.0 ℃	± (0.2%+0.5°C)		1 °F	32 to 1112 °F	± (1 %+10°F)
	0.1 °F	-148.0 to -58.0 °F	± (0.2%+1.8°F)			1113 to 3092 °F	± (1.5 %+10°F)
	0.1 °F	-57.9 to 2102.0 °F	± (0.2%+1°F)				

OPTIONAL TEMPERATURE PROBE & OTHER ACCESSORIES			
Carrying Case, CA-06	Model : CA-06, Hard carrying case		
Carrying Case, CA-03	Model: CA-03, Vinyl soft carrying case.		
Thermocouple Probe	Measure Rage : -40 °C to 250 °C, -40 °F to 482 °F.		
( Type K ) TP-01	Ultra fast response naked-bead thermocouple, general purpose application.		
Thermocouple Probe	Measure Range : -50 °C to 900 °C , -50 °F to 1650 °F.		
( Type K ), TP-02A	Dimension: 10 cm tube, 3.2 mm Dia.		
Thermocouple Probe	Measure Range : -50 °C to 1200 °C, -50 °F to 2200 °F.		
( Type K ), TP-03	Dimension: 10 cm tube, 8 mm Dia.		
Surface Probe	Measure Range : -50 °C to 400 °C , -50 °F to 752 °F.		
( Type K ), TP-04	Size: Temp. sensing head - 15 mm Dia. Probe length - 120 mm.		
RS232 cable, UPCB-02	RS232 cable for connecting between the meter & the computer.		
Application Software,	Windows software apply as the performance of data logging system & data recorder		
SW-U801-WIN			

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