Mini pocket type, Emissivity adj., Laser target light

INFRARED THERMOMETER

Model: TM-958 *ISO-9001, CE, IEC1010*







The Art of Measurement

Laser Target Light

INFRARED THERMOMETER

Model: TM-958

1. FEATURES

- * Infrared thermometer, non-contact temperature measurement, -30 to 300 $^{\circ}$ C (-22 to 572 $^{\circ}$ F), precision for none contact temperature measurement.
- * Microcomputer circuit with high performance.
- * Wide temperature measuring range.
- * Measurement via one operation button, easy to operate.
- * Build in °C & °F select switch.
- * Automatic data hold.
- * 0.95 default emissivity value.
- * Emissivity value can adjust from 0.2 to 1.00.
- * Back light LCD display.
- * LCD display both temperature and the emissivity value.
- * Laser target guide for IR thermometer.
- * 0.5 degree display resolution.
- * Auto power shut off saves battery life.
- * Built-in low battery indicator.
- * Compact housing case with stand.
- * Operates from 006P DC 9V battery.

2. SPECIFICATIONS

2-1 General Specifications

* Main display to show temp. value. * Lower display to show emissivity value. * Back Light. Functions C, F, Auto data hold, Auto power off, Auto LCD back light, Emissivity adjustment. Measurement Range Resolution 0.5 C/0.5 F. Circuit Exclusive microcomputer circuit. Emissivity Adjustment range: 0.20 to 1.00. Adjustment * 0.95 default emissivity value. * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication Over Indication Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 25 mA, w/o laser light out. Operating Temp. and Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	2-1 General 3	podifications
* Lower display to show emissivity value. * Back Light. Functions C, °F, Auto data hold, Auto power off, Auto LCD back light, Emissivity adjustment. Measurement Range Resolution 0.5 °C/0.5 °F. Circuit Exclusive microcomputer circuit. Emissivity Adjustment range: 0.20 to 1.00. Adjustment Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication Over Indication DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating Temp. and Humidity Weight 140 g/0.3 LB (without battery). Standard Operational manual 1 PC.	Display	LCD, 29 mm x 33 mm.
* Back Light. Functions C, °F, Auto data hold, Auto power off, Auto LCD back light, Emissivity adjustment. Measurement Range Resolution O.5 °C/0.5 °F. Circuit Exclusive microcomputer circuit. Emissivity Adjustment range: 0.20 to 1.00. * 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication Over Indication DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating Oto 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Standard Operational manual 1 PC.		* Main display to show temp. value.
Functions C, °F, Auto data hold, Auto power off, Auto LCD back light, Emissivity adjustment. Measurement Range Resolution Circuit Exclusive microcomputer circuit. Emissivity Adjustment range: 0.20 to 1.00. * 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Hold and After release the operation switch, display will hold the last measuring Value within 5 seconds continuously. Over Indication Over Indication Power Supply Consumption Power Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 30 C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Standard Operational manual 1 PC.		* Lower display to show emissivity value.
Auto data hold, Auto power off, Auto LCD back light, Emissivity adjustment. -30 to 300 °C (-22 to 572 °F), Range Resolution Circuit Exclusive microcomputer circuit. Emissivity Adjustment range : 0.20 to 1.00. * 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Aprox. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication Over Indication Power Supply Consumption Power Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Approx. DC 120 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Standard Operational manual 1 PC.		* Back Light.
Auto power off, Auto LCD back light, Emissivity adjustment. Measurement Range Resolution O.5 °C/0.5 °F. Circuit Exclusive microcomputer circuit. Emissivity Adjustment range: 0.20 to 1.00. Adjustment Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Hold and After release the operation switch, display will hold the last measuring Off function Over Indication Samply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating Oto 50 °C (32 to 122 °F). Less than 80% RH. Value Vithout battery (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Functions	°C, °F,
Auto LCD back light, Emissivity adjustment. Measurement Range Resolution O.5 °C/0.5 °F. Circuit Exclusive microcomputer circuit. Emissivity Adjustment range : 0.20 to 1.00. Adjustment Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Hold and After release the operation switch, display will hold the last measuring Off function Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤-30 °C, display will show -30 °C and flashed. DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating Oto 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Standard Operational manual 1 PC.		Auto data hold,
Emissivity adjustment. Measurement Range Resolution O.5 °C/0.5 °F. Circuit Exclusive microcomputer circuit. Emissivity Adjustment range: 0.20 to 1.00. Adjustment * 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication Over Indication DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating O to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Standard Operational manual 1 PC.		Auto power off,
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Resolution O.5 °C/0.5 °F. Circuit Exclusive microcomputer circuit. Emissivity Adjustment range : 0.20 to 1.00. * 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤-30 °C, display will show -30 °C and flashed. DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Operating Temp. and Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.		Emissivity adjustment.
Resolution Circuit Exclusive microcomputer circuit. Emissivity Adjustment range : 0.20 to 1.00. * 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring Off function value within 5 seconds continuously. Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≥ -30 °C, display will show -30 °C and flashed. Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating 0 to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Measurement	-30 to 300 $^{\circ}\mathrm{C}$ (-22 to 572 $^{\circ}\mathrm{F}$),
Circuit Exclusive microcomputer circuit. Emissivity Adjustment range : 0.20 to 1.00. * 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤ -30 °C, display will show -30 °C and flashed. Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating 0 to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Range	
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* 0.95 default emissivity value. Target Guide * Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤-30 °C, display will show -30 °C and flashed. DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 °C (32 to 122 °F). Temp. and Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Circuit	Exclusive microcomputer circuit.
* Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤ -30 °C, display will show -30 °C and flashed. Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Emissivity	Adjustment range: 0.20 to 1.00.
* Class 2 laser diode. Red. Wave length is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤ -30 °C, display will show -30 °C and flashed. Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Adjustment	* 0.95 default emissivity value.
is 645 nm approximately. Sampling Time Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring value within 5 seconds continuously. Over Indication $\geq 305 ^{\circ} \!$	Target Guide	* Less than 1 mW.
Approx. 0.6 second. Hold and After release the operation switch, display will hold the last measuring Off function Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤-30 °C, display will show -30 °C and flashed. DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Operating O to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.		* Class 2 laser diode. Red. Wave length
Hold and After release the operation switch, Auto Power display will hold the last measuring value within 5 seconds continuously. Over Indication $\geq 305 ^{\circ}\text{C}$, display will show 350 $^{\circ}\text{C}$ and flashed. $\leq -30 ^{\circ}\text{C}$, display will show -30 $^{\circ}\text{C}$ and flashed. Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 $^{\circ}\text{C}$ (32 to 122 $^{\circ}\text{F}$). Temp. and Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.		is 645 nm approximately.
Auto Power Off function value within 5 seconds continuously. Over Indication $\geq 305 ^{\circ}\text{C}$, display will show 350 $^{\circ}\text{C}$ and flashed. $\leq -30 ^{\circ}\text{C}$, display will show -30 $^{\circ}\text{C}$ and flashed. Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 $^{\circ}\text{C}$ (32 to 122 $^{\circ}\text{F}$). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Sampling Time	Approx. 0.6 second.
Off function Over Indication ≥ 305 °C, display will show 350 °C and flashed. ≤-30 °C, display will show -30 °C and flashed. Power Supply DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Operating O to 50 °C (32 to 122 °F). Temp. and Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Hold and	After release the operation switch,
Over Indication \geq 305 °C, display will show 350 °C and flashed. \leq -30 °C, display will show -30 °C and flashed. DC 9V battery, 006P, MN1604 (PP3) or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Auto Power	display will hold the last measuring
Second Flashed. Second Flashed	Off function	value within 5 seconds continuously.
Power Supply or equivalent, heavy duty or Alkaline. Power Approx. DC 14 mA, with laser light out. Consumption Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Over Indication	\geq 305 $^{\circ}\mathrm{C}$, display will show 350 $^{\circ}\mathrm{C}$ and flashed.
or equivalent, heavy duty or Alkaline. Power Consumption Operating Temp. and Humidity Weight Dimension Or equivalent, heavy duty or Alkaline. Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Oto 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Operational manual 1 PC.		\leq -30 $^{\circ}$ C, display will show -30 $^{\circ}$ C and flashed.
Power Approx. DC 14 mA, with laser light out. Approx. DC 25 mA, w/o laser light out. Operating 0 to 50 $^{\circ}$ C (32 to 122 $^{\circ}$ F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Power Supply	DC 9V battery, 006P, MN1604 (PP3)
ConsumptionApprox. DC 25 mA, w/o laser light out.Operating0 to 50 $^{\circ}$ C (32 to 122 $^{\circ}$ F).Temp. andLess than 80% RH.Humidity140 g/0.3 LB (without battery).Dimension160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch).StandardOperational manual 1 PC.		or equivalent, heavy duty or Alkaline.
Operating O to 50 °C (32 to 122 °F). Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Power	Approx. DC 14 mA, with laser light out.
Temp. and Less than 80% RH. Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Consumption	Approx. DC 25 mA, w/o laser light out.
Humidity Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Operating	0 to 50 °C (32 to 122 °F).
Weight 140 g/0.3 LB (without battery). Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Temp. and	Less than 80% RH.
Dimension 160 x 92 x 45 mm. (6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Humidity	
(6.3 x 3.6 x 1.8 inch). Standard Operational manual 1 PC.	Weight	140 g/0.3 LB (without battery).
Standard Operational manual 1 PC.	Dimension	160 x 92 x 45 mm.
·		(6.3 x 3.6 x 1.8 inch).
Accessory	Standard	Operational manual 1 PC.
	Accessory	

2-2 Electrical Specifications

2-2 Electrical	Specifications
Measurement	-30 to 300 $^{\circ}\mathrm{C}$ (-22 to 572 $^{\circ}\mathrm{F}$),
Range	
Resolution	0.5 ℃/0.5 °F.
Accuracy	\pm 3 % of reading or \pm 3 $^{\circ}$ C (5 $^{\circ}$ F), which
	ever is greater.
	* Meter operating temp. within 23± 5 $^{\circ}$
	and the emissivity value of
	measurement target set to 0.95.
	* 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	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 meter.
Wave length	
Region	
Distance Factor	D/S: Approx. 7:1.
	D - Distance, S - Spot.