# DATASHEET



### InfraRed Thermometer IRT-1002K

### **APPLICATIONS & FEATURES**

Wide range application:

Food preparation, Safety and Fire inspectors, Plastic molding, Asphalt, Marine and screen printing, measure ink and dryer temperature, Diesel and Fleet maintenance.

Field of View

Meter's field of view is 13:1, meaning that if the meter is 10 inches from the target, the diameter of the object under test must be at least 1 inch. Other distances are shown below in the field of view diagram. Refer to the chart printed on the meter for more information.

Features:

- Precise non-contact measurements
- Built-in laser pointer
- Automatic selection range and Resolution to 0.1° or 1°
- °C/°F switchable button
- Automatic Data Hold & Auto power off
- The meter at 13 inches away measure 1 inch target
- Backlit LCD display
- MAX/MIN temperature measurement Function



IRT1002 comes with following accessories:

- 9 Volt battery
- Soft case

MODEL:IRT-1001P D:S=10:1	Lase	er Beam
Distance(D) to Spot Size(S)	inch	16mm
0.1@1 1@10	2@20	
0.1@1 1@10		<u> </u>
	_()	S S
10@100 30@300		Concer Deem
	50@500	Sensor Beam
	mm	
KL)	D	

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#### SPECIFICATIONS

**General specifications** 

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MEAS. RANGES	-50.0°C to 800°C/-58.0°F to 1472°F		
SAMPLE RATE	Less than 1 second		
OVER RANGE INDICATION	LCD will show "OL"and"-OL"		
POLARITY	Automatic (no indication for positive polarity); Minus (-) sign for negative polarity.		
EMISSIVITY	0.95 fixed value		
FIELD OF VIEW	D/S = Approx. 13:1 ratio (D = distance, S = spot)		
FIELD OF VIEW	(Has 80% encircled energy at the focal point)		
DIODE LASER	Output <1mW, Wavelength 630~670nm,class 2 (II) Laser product		
SPECTRAL RESPONSE	6~14um		
POWER OFF	Automatic shut off after 7 seconds, approx.		
OPERATING TEMP.	0°C to 50°C (32°F to 122°F)		
STORAGE TEMP.	-20°C to 60°C(-4°F to 140°F)		
RELATIVE HUMIDITY	10%~90%RH operating, <80%RH storage		
POWER SUPPLY	9V battery, NEDA 1604A or IEC 6LR61, or equivalent		
WEIGHT	180g.		
SIZE	82 x 41.5 x 160mm		

#### Infrared thermometer specifications

Range		Resolution	Accuracy
	-50.0 <sup>0</sup> C to -20.0 <sup>0</sup> C	0.1 <sup>0</sup> C	<u>+</u> 5 °C;
-50.0 <sup>0</sup> C to 760.0 <sup>0</sup> C	-20.0 <sup>0</sup> C to 200.0 <sup>0</sup> C		$\pm$ 2% of reading or $\pm$ 2°C;
	200.0 <sup>O</sup> C to 760 <sup>.00</sup> C		± 2.5% of reading ± 2°C

Range (Automatic selection 0.1	°F/1°F)	Resolution	Accuracy
-58.0°F to1400 °F	-58.0 °F to -4.0 <sup>O</sup> C °F	0.1°F	<u>+</u> 9°F;
	-4.0°F to 200.0 °F		$\pm 2\%$ of reading or $\pm 4$ °F;
	200.0°F to 999.9°F		
	<b>1000</b> °F to 1400°F	1°F	$\pm 2.5\%$ of reading $\pm 4$ °F;

#### Note:

Accuracy is given at 18 °C to 28 °C (64 °F to 82 °F), less than 80%RH.

Field of View:

Make sure that the target is larger than the unit's spot size. The smaller the target, the closer you should be to it. When accuracy is critical, make sure the target is at least twice as large as the spot size.

#### Emissivity:

0.95 fixed value