

Cat.No.8264-00

## Infrared Thermometer Model SK-8920

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Ideal for food processing industries. Easy to select suitable emissivity of food referring to the illustrations on the panel. 10:1 Distance to spot ratio. The laser marker can instantly identify the target.




### FEATURES

- Instant surface temperature measurement:  
The advantage of the non-contact infrared method is quick-response measurement. And the single-hand-held unit allows easy operation by using the trigger type measurement button.
- Non-contact and clean measurement:  
Ideal for food processing industries where clean and hygienic measurement is required
- Selectable emissivity:  
Emissivity is selectable among 0.98, 0.92 and 0.85.
- Easily visible measurement spot:  
With the laser marker on, a laser sighting is output to instantly identify the measured spot.
- Auto power off function:

The power will be automatically turned off if the unit has not been operated for about five seconds, thus conserving battery power if you forget to turn the power off.

- Wide range of temperature:  
A wide range of temperature from -40 to 250°C
- Auto Hold function:  
A measured value is automatically held (fixed) for about six seconds.
- Top and grip cover:  
The cover protects the unit from dust or dirt.

### Emissivity

0.98		Meat, fish, vegetable, fruits, bread, wheat, grain etc.
0.92		Paper, drink box etc.
0.85		Frying pan, iron-cast pan



### SPECIFICATIONS

Model	SK-8920	
Measuring range	-40 to 250°C	
Accuracy	± 3°C at -40°C to -20.0°C	
	± 2°C or ± 2% rdg at 19.9 to 250°C	
	(conditions)	Ambient temperature at 23°C ± 5°C calibrated by black body with the emissivity at 0.95
Resolution	1°C at higher than 100°C 0.1°C at other than above	
Emissivity (*1)	Selectable among 0.98, 0.92 and 0.85	
Distance to spot ratio (*2)	10 : 1	
Sensor	Thermopile	

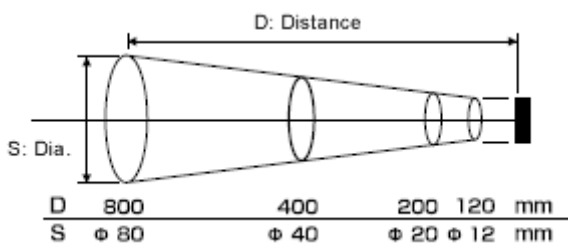
Spectral response (*3)	8 to 14 $\mu$ m
Response time	0.5 second
Laser sighting	1 point, Class II Laser (use less than 1mW of power)
Wave length	650 nm
Output	less than 1mW
Operating ambient	0 to 50°C for temperature less than 80%rh for humidity (no condensing)
Storage ambient	-20 to 50°C for temperature less than 90%rh for humidity (no condensing)
Power requirement	9V battery x 1 (included)
Power consumption	max. 28mA (when Laser ON)
Battery Life	approx. 8 hours (Laser ON) approx. 70 hours (Laser OFF)
Functions	Selectable emissivity Laser marker ON/OFF Auto power off Hold
Dimensions	(W) 46 x (H) 160 x (D) 78 mm
Weight	approx. 157 g (with battery)
Materials	Unit: ABS resin Covers: PVC resin
Standard accessories	9V battery x 2 (one is factory set), Hand strap, Soft pouch, Vinyl Cover (top and grip cover)

**(\*1) Emissivity:**

An object's ability to emit or absorb energy. Perfect emitters have an emissivity of 1. An object with emissivity of 0.8 absorbs 80% and reflects 20% of the incidental energy. Emissivity may vary with temperature and spectral response (wavelength).

**(\*2) Distance to spot ratio (D:S)**

The infrared thermometer focuses infrared energy from an object onto its detector at the rate. 10:1 distance to spot ratio means that the infrared thermometer will read 50mm diameter area 500mm away. (The measuring spot is defined on the basis of the area that receives 90% or more of the energy)



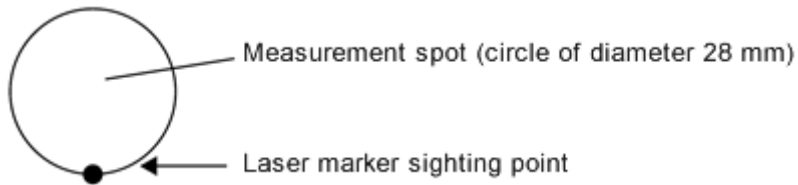
**(\*3) Spectral Response:**

The specific wavelength region where an infrared thermometer responds (in the 0.7 to 20 $\mu$ m band of the electromagnetic spectrum). Instrument response is dependent on the emissivity, reflectance, and the transmission of infrared energy. A spectral response in the range of 8 to 14 $\mu$ m is good for general use.



### Positional Relation between Distance and Sighting Point

This is a one-point laser-sighting thermometer. The laser mark is sighted approximately 14 mm below the center of the spot.

(When the distance is approximately 280 mm)



When the measurement distance is approximately 280 mm, the laser marker is output aiming at the point illustrated above. Refer to the figure as a guide.

	<p><b>Cautions on safety</b></p> <p>Read this manual thoroughly before using and keep it in a safe place for future references.</p>		<p>It is dangerous if the laser beam gets into an eye. (Max. 1.0mW 650nm Class II Laser Product)</p>
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