

Infrared Thermometer Model SK-8300



Model

SK-8300

With the wide measuring range of -30 to 1550°C, this thermometer can detect extremely high temperature to be used for wider applications. Its "distance to spot ratio", 50:1, enables to measure smaller spots. Emissivity is settable between 0.10 and 1.00 with 0.01 steps.

Features

- Quick measurement for surface temperature:
The advantage of the non-contact infrared method is quick-response measurement. The single-hand-held unit allows easy operation by use of the trigger type measurement button.
- High-temperature measurement:
Wide measurement range of -30 to 1550°C The laser marker indicates the spot of measurement with a clear point.
- Distance to measurement spot ration (D:S): About 50:1
(D:Distance, S:Spot)
- Alarm function of upper and lower thresholds:
Alarm is triggered when a measured temperature value exceeds upper or lower set value.
- Data Memory function:
Store up to 10 data
- Various indications:
MAX(Maximum temperature value), MIN(Minimum temperature value),AVG(Average temperature value), ΔT(Difference between maximum and minimum temperature values)

- Auto Measurement function:
Continuous measurement without holding the trigger down
- Functions:
Backlight: The backlit LCD facilitates to read measured values in dark. Auto Power-Off function: This function conserves battery power when you forgot to turn the power off.
- Settable emissivity with 0.01 step among 0.10 to 1.00.
- Tripod fixable:
The unit can be fixed to a tripod for measurement.
- Class II Laser Product with PSC mark:
This product is designed to comply with portable laser instrument Consumer Product Safety Act.



Specifications

Cat. No.	No.8268-00
Model	SK-8300
Measuring range	-30°C to 1550°C
Accuracy	-30.0°C to -20.1°C : ± 3°C -20.0°C to 100.0°C : ± 2°C Other than above : ± 2%rdg (Condition: Ambient temperature at 23°C ± 5°C, calibrated by black body emissivity at 0.95)
Resolution	0.1°C
Emissivity	Adjustable at 0.01 within 0.10 to 1.00 Refer to the emissivity table
Distance to spot ratio	D:S = approx. 50:1 (D: Distance, S: Spot size)
Sensing element	Thermopile
Spectral response	8 to 14μm

Laser Marker	Class II laser product with PSC mark Wavelength: 650nm Output: less than 1mW
Operation ambient	0 to 50°C for temperature, less than 85%rh for humidity (no condensing)
Storage ambient	-10 to 50°C for temperature, less than 85%rh for humidity (condensing)
Power requirements	9VDC (Battery (006P) x 1 pc.)
Power consumption	40mA (When laser and backlight ON)
Battery life	Approx. 8 hours continuous use (use of alkali battery) (When laser and backlight ON under normal temperature)
Backlight	LCD with backlight
Weight and dimensions	Approx 280g (including battery) (W)51 x (H)200 x (D)166mm
Accessories	One 9V alkali battery , hand strap, hard case

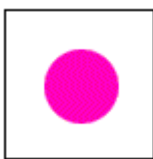
* All specifications subject to change without notice

Distance to spot ratio (D:S)

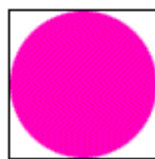
The SK-8300 focuses energy from an object onto its detector at the rate of approximately 50:1 (D = Distance, S = Spot size). The SK-8300 will read an area of 19mm in diameter from 500mm away. For higher accuracy, make sure the area of the object at least twice as large as the spot being measured.

For better measurement:

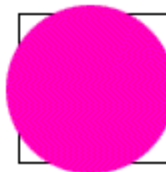
Square: measured object Circle: measurable range:



Good



Within the range, but for better measurement, get near to the object.



It measures ones in addition to object. Get near to the measurable range.

*Caution

It is dangerous if the laser beam gets into an eye. Do not look directly into the laser emitting window and do not point the laser at people.

(Class II) A visible light of a wavelengths in the visible region, 400nm through 700nm, with an output level, approximately 1mW or less, that is normally regarded harmless with respect to humans' physical defense capabilities.



Caution for safety

Read this manual thoroughly to use SK-8300 safety



Do not point the laser at people
Class II laser product:
MAX1.0mW 650nm