



OPTEX'S Unique Non-Contact Temperature Sensor

Checking, counting, and detecting the temperature change of objects from the pre-set value shown on the LCD display.



NEW

OPTEX Product Information
Non Contact Thermometer

THERMO-HUNTER
BUILT-IN2

BA-30TC
BA-06TC

photo MOS relay output type



CAUTION
DO NOT STARE INTO BEAM
LASER DIODE POWER MAX1.0mW
WAVE LENGTH670nm
CLASS2 LASER PRODUCT

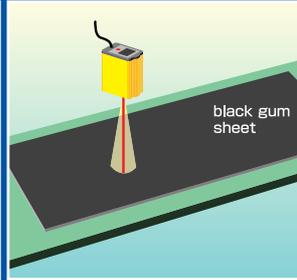
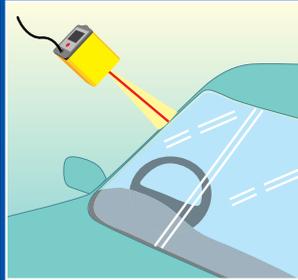
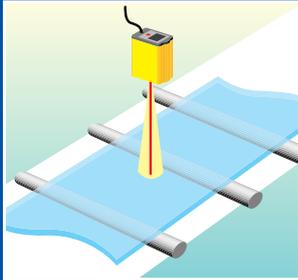
CAUTION
LASER RADIATION
DO NOT STARE INTO BEAM
670nm/1.0mW MAX
CLASS II LASER PRODUCT
THIS PRODUCT COMPLIES WITH
21 CFR 1040.10 AND 1040.11

- Measuring range : 0~500°C
(Detecting temperature range)
- Coaxial laser marker
- Built-in digital display
- photo MOS relay output

Application example
Presence detection of the lid of ice cream

THERMO-HUNTER BUILT-IN2 BA-30TC/BA-06TC

(photo MOS relay output type)



Temperature detecting of a transparent film. Temperature check of glass adhesion. Presence detection of gum sheet.

BA series Information

Analogue output Type.

BA-30TA/BA-30TV
BA-06TA/BA-06TV
TA type...4-20mA output
TV type...1mV/C output



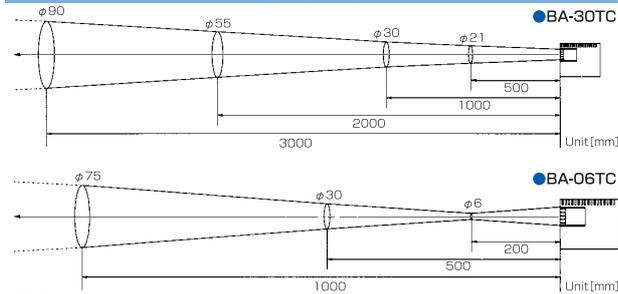
Specifications

Model	BA-30TC	BA-06TC
Temperature Range	0~500°C (display -20~520°C)	
Area Size	φ30mm/1000mm	φ6mm/200mm
Optics	Silicon lens	
Sensing element/wavelength	Thermopile/8~14μm	
Response Time	500ms/90%	
Accuracy	±1% of reading value or ±2°C±1 digit, whichever is greater (ε≠1.0)	
Repeatability	±1°C of reading value	
Display Resolution	1°C	
Relay output	Photo Mos relay output, 350mA·DC100V Max	
Output renewal interval	50msec	
Sighting Method	Coaxial laser marker	
Emissivity ratio (ε) Adjustment	0.10~1.20	
Delay Function	1~200(0.5~10sec) Variable	
Power Supply	DC12~24V±10%/MAX150mA	
Ambient temperature	0~50°C	
Environmental Humidity	35~85%RH (without dew condensation)	
Storage Temperature	-10~60°C	
Vibration Resistance	3G(20~50Hz, according to JIS C0911)	
Water Resistance	IP65	
Materials	Ring case : glass-containing PBT, Rear cover : pc	
Weight	360g	

Accessories : Attachment Fitting×1, M4 screw×2

*Design and specifications are subject to change for product improvement without prior notice.

Field of View



* The laser marker is aimed at the center of the measuring area.
* The optical resolution values stated in 'Field of View' are at 90% energy.
* The size of measuring object should be sufficiently larger than the 'Field of View' (spot size) shown in the above illustration.

Option

<Option>Black Tape



HB-250

- Dimensions 60mm×2000mm
- Withstand heat up to 250°C

[Hint for accurate measurement]

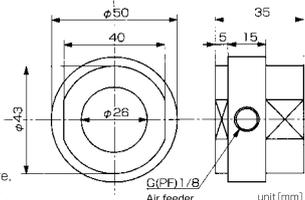
The black tape (HB-250) is designed for more accurate measurement, especially if the target object has a shiny surface. Apply HB-250 on the surface of the target and measure the area covered by HB-250 with emissivity setting at 0.95.

Adaptable to dusty environments Air purge collar

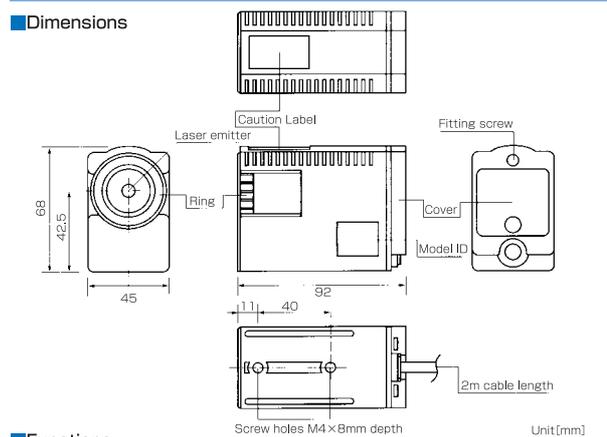


BA-API

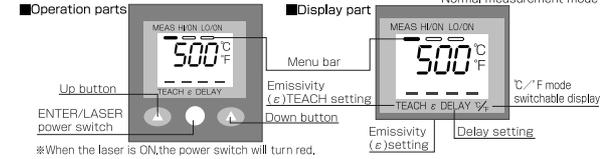
Air purge collar is used keep dusts, moisture, airborne particles and vapors away from the lens.



Dimensions

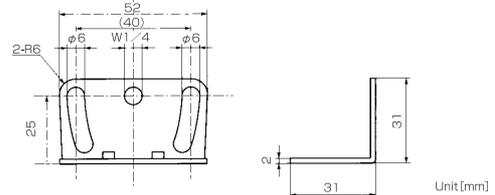


Functions



*When the laser is ON, the power switch will turn red.

Fixture



Safe Usage

- WARNING** Do not look into the laser or direct it toward the eyes. Even the reflection is harmful. Laser may cause eye injury or damage your health.
- CAUTION** This product is not a clinical thermometer; therefore, it cannot be used for medical purposes.

Environmental Warnings

- KEEP THE THERMOMETER AWAY FROM DIRECT SUNLIGHT, DUST, HIGH TEMPERATURES AND HIGH HUMIDITY WHILE IN USE AND STORAGE. This may cause irreparable damage or incorrect measurement.
- DO NOT EXPOSE THE THERMOMETER TO SUDDEN TEMPERATURE CHANGES. Sudden temperature change of the environment may cause incorrect measurement. In such cases, wait until the thermometer reaches steady temperature before taking measurement.
- KEEP THE THERMOMETER AWAY FROM STRONG ELECTROMAGNETIC SOURCES, CORROSIVE OR EXPLOSIVE GASES. This may cause irreparable damage or incorrect measurement.

Usage Warnings

- AVOID MEASURING SHINY SURFACES. Shiny surfaces reflect radiation from surrounding objects. Although the emissivity ratio can be adjusted to compensate for this problem, accurate measurement is difficult.
- USE THE CORRECT VOLTAGE. Applying voltages other than 12-24VDC may cause short-circuit, damages, fire or injury. In such cases, turn the power off immediately.
- DO NOT LET THE THERMOMETER TOUCH THE OBJECTS THAT IS BEING MEASURED. The unit is a non-contact thermometer. Touching or getting too close to the objects with high temperatures may cause irreparable damage or incorrect measurement.
- DO NOT TOUCH THE LENS. Do not touch the lens with anything hard or things with sharp points, which may damage the lens. A damaged lens causes incorrect measurement.
- KEEP THE THERMOMETER AWAY FROM CHARGED OBJECTS. This may cause irreparable damage or incorrect measurement.

Products mentioned in this catalogue are equipped with Class 2 laser. In case of re-export to foreign countries, please confirm the relevant regulation for laser products in the destination country.



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