Non-Contact Infrared Thermometer
Handheld Models
IT-540 Series
IT-550 Series
Quick, Accurate and Easy
A full lineup of hand-held infrared thermometers covering a wide range of measurement needs

Every unit offers reliable functionality, narrow focus, splash resistance and low cost exceptional performance. HORIBA has the ideal model to meet your specific temperature measurement needs.

### Narrow-focus model

<table>
<thead>
<tr>
<th>Model</th>
<th>Temp Range</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT-550F</td>
<td>-50°C ~ 500°C</td>
<td>Twin beam marker, Digital output, Printer output, Splash-resistant, Memory function</td>
</tr>
<tr>
<td>IT-550L</td>
<td>-50°C ~ 500°C</td>
<td>Twin beam marker, Digital output, Analog output, Splash-resistant, Display resolution switch</td>
</tr>
<tr>
<td>IT-540N</td>
<td>-50°C ~ 500°C</td>
<td>Twin beam marker, Upper/Lower temp alarm, Measurement hold function</td>
</tr>
<tr>
<td>IT-540NH</td>
<td>-50°C ~ 1000°C</td>
<td>Twin beam marker, Upper/Lower temp alarm, Measurement hold function</td>
</tr>
</tbody>
</table>

### Standard model

<table>
<thead>
<tr>
<th>Model</th>
<th>Temp Range</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT-540E</td>
<td>-50°C ~ 500°C</td>
<td>Upper/Lower temp alarm, Measurement hold function</td>
</tr>
<tr>
<td>IT-540W</td>
<td>-50°C ~ 500°C</td>
<td>One beam marker, Measurement hold function</td>
</tr>
<tr>
<td>IT-540WE</td>
<td>-50°C ~ 500°C</td>
<td>Measurement hold function</td>
</tr>
</tbody>
</table>

### Spot focus model

<table>
<thead>
<tr>
<th>Model</th>
<th>Temp Range</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT-550S</td>
<td>-50°C ~ 500°C</td>
<td>Twin beam marker, Digital output, Analog output, Splash-resistant, Display resolution switch</td>
</tr>
<tr>
<td>IT-540S</td>
<td>-50°C ~ 500°C</td>
<td>LED target marker, Upper/Lower temp alarm, Measurement hold function</td>
</tr>
</tbody>
</table>
Non-Contact Infrared Thermometer

IT-550 Series

Narrow Focus, Splash-Resistance & Digital Output
The Twin-Laser Sight Makes Measurements A Snap!

Narrow-focus type

Target area of ø24/1000 mm (F and L models)
The twin laser sight makes it easy to focus on target. The F (Field) model, L (Lab) model and the S (Spot) model all have unique twin-laser sights optimized for your applications. The F and L models require only 1/3 of target area, when compared to older models, making it easier to measure temperature of small objects from a distance. The S model’s target area is ø2.5/73 mm.

Splash-resistance

The splash-resistant non-contact thermometer!
IT-550 is splash-resistant. It can be safely used in kitchens and other type of spaces where thermometers may get wet. It can safely be operated with a wet hand, making it ideal for use in food industry.

Digital Output

Memory function, Digital Output, Voltage Output, PC/Printer connection and more!
Speedup data processing by collecting temperature measurements directly from the thermometer!
The optional expansion kit (sold separately) lets you connect the thermometer (F model) to printers and print data directly from its memory. The thermometers with digital/voltage output (L & S models) can easily hookup to a computer/recorder and export data for spreadsheets or word processors.

HACCP-Compliance

* A wet lens can cause errors in readings. Completely wipe off any water from the lens before use.

Option

- Expansion kit
- PC software
- Expansion box
- Modular cable
- Analog output cable
* The expansion kit does not include any connection cable(s) required between the expansion box and the PC/Printer.
Graphing made easy

- Using the accompanied software (L & S models)
- Exporting data to spreadsheets (all models)

Obtaining hardcopy

- Sample printout

Simplifying reports

- Sample report

Data manipulations

- Sample screen of MS Excel
- Sample screen of MS Word

Using a graphical recorder

- Sample graph

### Specifications

**IT-550F**

- Target size: ø24/1000 mm
- Display resolution: ±0.1°C or ±5% RH
- Accuracy: ±0.1°C or ±5% RH
- Response time: 1.6 s or less (95%)
- Power supply: 9 V dry battery (6F22 or 6L61) x 1

**IT-550L**

- Target size: ø24/1000 mm
- Display resolution: ±0.1°C or ±5% RH
- Accuracy: ±0.1°C or ±5% RH
- Response time: 1.6 s or less (95%)
- Power supply: 9 V dry battery (6F22 or 6L61) x 1

**IT-550S**

- Target size: ø24/1000 mm
- Display resolution: ±0.1°C or ±5% RH
- Accuracy: ±0.1°C or ±5% RH
- Response time: 1.6 s or less (95%)
- Power supply: 9 V dry battery (6F22 or 6L61) x 1
Non-Contact Infrared Thermometer

IT-540 Series

The easy-to-carry, compact & lightweight design
3 Types of narrow field, low cost and spot focus

Simple, advanced design

For routine maintenance work
Narrow-focus model (Dual beam model)

For measuring electronic components
Spot focus model

For measuring foods, etc.
Standard model

| Measurement temp range | Display temp. range | Display resolution | Accuracy  
|------------------------|--------------------|-------------------|-----------------------|-----------------------|
| -60 to 1000°C         | -60 to 60°C (68 to 932°F) | ±1°C              | ±0.1°C to 1°C: ±1% of reading  
|                        |                    |                   | 0 to 200°C: ±1% of reading  
|                        |                    |                   | -60 to -1°C: ±1% of reading -20°C (Emissivity=0.9, Temp. 10 to 25°C Humidity 65±5%)  
|                        |                    |                   | 20°C to 50°C: ±1% of reading  
|                        |                    |                   | 0 to 200°C: ±1°C of reading  
|                        |                    |                   | -60 to -1°C: ±1% of reading -20°C (Emissivity=1.0, Temp. 10 to 25°C Humidity 65±5%)  

<table>
<thead>
<tr>
<th>Spectral response: 8 to 15μm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissivity setting: 0.10 to 1.00 in 0.01 increments</td>
</tr>
<tr>
<td>Response time: Approx. 1 s (95%)</td>
</tr>
<tr>
<td>Target size: ø4/500 mm, ø2.5/300 mm, ø4/500 mm, ø10/4000 mm</td>
</tr>
<tr>
<td>Sight: 2-beam Laser sight (Class 2)</td>
</tr>
<tr>
<td>Power: AAA batteries x 4</td>
</tr>
<tr>
<td>Operating temp: 0 to 40°C</td>
</tr>
<tr>
<td>Operating humidity: 35 to 85% R.H. no condensation</td>
</tr>
<tr>
<td>Other functions: Upper/Lower temp alarm (between -65 and 1010°C)</td>
</tr>
<tr>
<td>Dimensions: 170(H) x 40(W) x 36(D) mm</td>
</tr>
<tr>
<td>Weight: Approx. 140g (Batteries included)</td>
</tr>
<tr>
<td>Accessories: AAA batteries x 4, carrying case, manual</td>
</tr>
</tbody>
</table>
Infrared Thermometer

Applications

**ELECTRIC / ELECTRONIC**

- **Copiers**
  To identify overheating during regular maintenance.

- **Electronic components**
  Check for abnormal heating while an object is in use. Spot infrared thermometers (IT540S/IT550S) can measure temperatures of very small parts.

**SAFETY / MAINTENANCE**

- **Piping**
  Check for overheating or freezing. Infrared thermometers can inspect different points easily and quickly.

- **Elevator machine room**
  Overheating inspection of the operator motor and other parts during regular maintenance.

**FOODS**

- **Ovens and dryers**
  Temperature control in baking and other process is crucial. Non-contact measurement is sanitary and leads to quality improvement.

**CONSTRUCTION / CIVIL ENGINEERING**

- **Thermal insulation**
  For R&D, comparison and inspection of insulators.
Please read the operation manual before using this product to assure safe and proper handling of the product.

- The contents of this catalog are subject to change without prior notice, and without any subsequent liability to this company.
- The color of the actual products may differ from the color pictured in this catalog due to printing limitations.
- It is strictly forbidden to copy the content of this catalog in part or in full.
- All brand names, product names and service names in this catalog are trademarks or registered trademarks of their respective companies.

http://www.horiba.com  e-mail: info@horiba.co.jp