LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for three years from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke’s behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

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Everett, WA  98206-9090
U.S.A.

Fluke Europe B.V.
P.O. Box 1186
5602 BD Eindhoven
The Netherlands

11/99
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Introduction
The Fluke 62 MAX and 62 MAX + Infrared Thermometers (the Product) can determine the surface temperature by measuring the amount of infrared energy radiated by the target’s surface. Note that the Japanese models indicate Celsius only.

⚠️ Warning
Read all safety information before you use the Product.

How to Contact Fluke
To contact Fluke, call one of the following telephone numbers:
- Technical Support USA: 1-800-44-FLUKE (1-800-443-5853)
- Calibration/Repair USA: 1-888-99-FLUKE (1-888-993-5853)
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31 402-675-200
- Japan: +81-03-6714-3114
- Singapore: +65-6799-5655
- Anywhere in the world: +1-425-446-5500
Or, visit Fluke's website at www.fluke.com.
To see, print, or download the latest manual supplement, visit http://us.fluke.com/usen/support/manuals.

Safety Information
A Warning identifies conditions and procedures that are dangerous to the user. A Caution identifies conditions and procedures that can cause damage to the Product or the equipment under test.

Table 1 tells you about symbols used on the Product and in this manual.

⚠⚠ Warning

To prevent eye damage and personal injury:
- Read all safety Information before you use the Product.
- Do not use the Product if it operates incorrectly.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- Before you use the Product, inspect the case. Do not use the Product if it appears damaged. Look for cracks or missing plastic.
• See emissivity information for actual temperatures. Reflective objects result in lower than actual temperature measurements. These objects pose a burn hazard.

• Do not look directly into the laser with optical tools (for example, binoculars, telescopes, microscopes). Optical tools can focus the laser and be dangerous to the eye.

• Do not look into the laser. Do not point laser directly at persons or animals or indirectly off reflective surfaces.

• Replace the batteries when the low battery indicator shows to prevent incorrect measurements.

• Do not use the Product around explosive gas, vapor, or in damp or wet environments.

• Use the Product only as specified or hazardous laser radiation exposure can occur.
## Table 1. Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠️</td>
<td>Risk of danger. Important information. See Manual.</td>
<td>⚠️</td>
<td>Do not dispose of this product as unsorted municipal waste. Go to Fluke’s website for recycling information.</td>
</tr>
<tr>
<td>⚠️</td>
<td>Warning. Laser.</td>
<td>⚠️</td>
<td>Conforms to European Union directives.</td>
</tr>
<tr>
<td>⚠️</td>
<td>Battery</td>
<td>⚠️</td>
<td>Conforms to relevant Australian standards.</td>
</tr>
</tbody>
</table>

Do not dispose of this product as unsorted municipal waste. Go to Fluke’s website for recycling information.

Conforms to European Union directives.

Conforms to relevant Australian standards.
Infrared Thermometer
Maintenance

Maintenance

⚠️ Caution
To avoid damage to the Product, do not leave the thermometer on or near objects of high temperature.

How to Change the Battery
To install or change the AA IEC LR06 battery, open the battery compartment and replace the battery as shown in Figure 16.

How to Clean the Product
Use soap and water on a damp sponge or soft cloth to clean the Product case. Carefully wipe the surface with a moist cotton swab. The swab may be moistened with water. See Figure 17.
# Specifications

<table>
<thead>
<tr>
<th></th>
<th>62 MAX</th>
<th>62 MAX +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Range</td>
<td>-30 °C to 500 °C</td>
<td>-30 °C to 650 °C</td>
</tr>
<tr>
<td></td>
<td>(-22 °F to 932 °F)</td>
<td>(-22 °F to 1202 °F)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>≥0 °C: ±1.5 °C or ±1.5 % of reading, whichever is greater (≥32 °F: ±3 °F or ±1.5 % of reading, whichever is greater) ≥ -10 °C to &lt;0 °C: ±2 °C (≥14 °F to &lt;32 °F: ±4 °F) &lt; -10 °C: ±3 °C (&lt;14 °F: ±6 °F)</td>
<td>≥0 °C: ±1 °C or ±1 % of reading, whichever is greater (≥32 °F: ±2 °F or ±1 % of reading, whichever is greater) ≥ -10 °C to &lt;0 °C: ±2 °C (≥14 °F to &lt;32 °F: ±4 °F) &lt; -10 °C: ±3 °C (&lt;14 °F: ±6 °F)</td>
</tr>
<tr>
<td>Response Time (95 %)</td>
<td>&lt;500 ms (95 % of reading)</td>
<td>&lt;300 ms (95 % of reading)</td>
</tr>
<tr>
<td>Spectral Response</td>
<td>8 to 14 microns</td>
<td></td>
</tr>
<tr>
<td>Emissivity</td>
<td>0.10 to 1.00</td>
<td></td>
</tr>
</tbody>
</table>
Infrared Thermometer  
Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>10:1 (calculated at 90 % energy)</th>
<th>12:1 (calculated at 90 % energy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical Resolution</td>
<td>10:1</td>
<td>12:1</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>0.1 °C (0.2 °F)</td>
<td>0.1 °C (0.2 °F)</td>
</tr>
<tr>
<td>Repeatability (% of reading)</td>
<td>±0.8 % of reading or ±1.0 °C (2 °F), whichever is greater</td>
<td>±0.5 % of reading or ±0.5 °C (1 °F), whichever is greater</td>
</tr>
<tr>
<td>Power</td>
<td>1 AA IEC LR06 Battery</td>
<td>1 AA IEC LR06 Battery</td>
</tr>
<tr>
<td>Battery Life</td>
<td>10 hours with laser and backlight on</td>
<td>8 hours with laser and backlight on</td>
</tr>
<tr>
<td>Weight</td>
<td>255 g (8.99 oz)</td>
<td>255 g (8.99 oz)</td>
</tr>
<tr>
<td>Size</td>
<td>(175 x 85 x 75) mm (6.88 x 3.34 x 2.95) inches</td>
<td>(175 x 85 x 75) mm (6.88 x 3.34 x 2.95) inches</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 °C to 50 °C (32 °F to 122 °F)</td>
<td>0 °C to 50 °C (32 °F to 122 °F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 °C to 60 °C (-4 °F to 140 °F), (without battery)</td>
<td>-20 °C to 60 °C (-4 °F to 140 °F), (without battery)</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>10 % to 90 % RH non-condensing @ 30 °C (86 °F)</td>
<td>10 % to 90 % RH non-condensing @ 30 °C (86 °F)</td>
</tr>
<tr>
<td>Operating Altitude</td>
<td>2000 meters above mean sea level</td>
<td>2000 meters above mean sea level</td>
</tr>
<tr>
<td>Storage Altitude</td>
<td>12,000 meters above mean sea level</td>
<td>12,000 meters above mean sea level</td>
</tr>
</tbody>
</table>
62 MAX/62 MAX +
Users Manual

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
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<tr>
<td>IP Rating</td>
<td>IP 54 per IEC 60529</td>
</tr>
<tr>
<td>Drop Test</td>
<td>3 meters</td>
</tr>
<tr>
<td>Vibration and Shock</td>
<td>IEC 68-2-6 2.5 g, 10 to 200 Hz, IEC 68-2-27, 50 g, 11 ms</td>
</tr>
<tr>
<td>EMC</td>
<td>EN 61326-1:2006 EN 61326-2:2006</td>
</tr>
</tbody>
</table>

**Standards and Agency Approval**

Compliance ............................................. EN/IEC 61010-1: 2001
Laser Safety ............................................ FDA and EN 60825-1 Class II
Infrared Thermometer

The Product

1

2

The Product
Infrared Thermometer
The Product

7

SEL

trig

On

+

10 min

OFF
62 MAX/62 MAX +
Users Manual
Infrared Thermometer
The Product

12

62 MAX
D:S = 10:1

D
S

38 mm @ 300 mm
60 mm @ 600 mm
100 mm @ 900 mm

1.5" @ 12"
2.4" @ 24"
4" @ 36"

62 MAX +
D:S = 12:1

D
S

33 mm @ 300 mm
50 mm @ 600 mm
85 mm @ 900 mm

1.4" @ 12"
2" @ 24"
3.4" @ 36"
Infrared Thermometer
The Product