

Thermometer Instruction Manual



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A. INTRODUCTION

1. Congratulations!!

Thank you for purchasing TPI products. The 360 series thermometers are easy to use and built to last. They are backed by a 3 year limited warranty. Please remember to complete and return your product warranty registration card

2. Product Description

The ergonomically designed 360 series hand-held thermometers are waterproof and offer high accuracy and reliability.

3. EC Declaration of Conformity

This is to certify that TPI 360 series thermometers conform to the protection requirements of the council directive 89/336/EEC, in the approximation of laws of the member states relating to Electromagnetic compatibility and 73/23/EEC. The Low Voltage Directive by application of the following standards:

EN 50081-1 1992 Emissions Standard EN 50082-1 1992 Immunity Standard EN 61010-1 1993 Safety Standard EN 61010-2-031 1995 Safety Standard EN 61010-2-032 1995 Safety Standard

To ensure conformity with these standard, this instrument must be operated in accordance with the instructions and specifications given in this manual.

CAUTION: Even though this instrument complies with the immunity standards, it's accuracy can be affected by strong radio emissions not covered in the above standards. Sources such as hand-held radio transceivers, radio and TV transmitters, vehicle radios and cellular phones generate electromagnetic radiation that could be induced into the test leads of this instrument. Care should be taken to avoid such situations or alternatively, check to make sure that the instrument is not being influence by these emissions.

CAUTION: Please follow manufacturers test procedures whenever possible. Do not attempt to measure unknown voltages or components until a complete understanding of the circuit is obtained.

B. SAFETY CONSIDERATIONS

⚠ WARNING: Use caution when performing mea surements on temperatures above 100°F.

GENERAL GUIDELINES ALWAYS

- Test your thermometer before using it to make sure it is operating properly.
- Inspect temperature probes before using to make sure there are no breaks or shorts.
- · Double check all connections before testing.

NEVER

- Insert the probe into an electrically charged medium.
- Touch the probe tip or shaft after it has been inserted in a hot substance.

C. TECHNICAL DATA

1. Features and Benefits

Large LCD Easy to read measurement results

High Accuracy Reliable test results.

Water Proof Rugged and built to last.

Auto Off Automatically powers off after

30 minutes of inactivity.

2. Product Applications

Perform the following tests and/or measurements with the 360 series thermometers:

Validate the temperature of incoming food product prior to accepting deliveries.

Measure food storage temperature.

Verify cooking and storage temperature.

Confirm hot and cold holding cabinet temperatures.

Measure food reheating temperatures.

Monitor frozen food thawing temperature.

3. Specifications

Input Type Range

K-Type Thermocouple -328°F to 1,112°F (-200°C to 600°C)

K-Type Connection Sub-mini

Accuracy $+/-(0.1\% \text{ of reading} + 0.4^{\circ}\text{F} (0.2^{\circ}\text{C}))$

Resolution $> -100^{\circ}C = 0.1^{\circ}C, \le 100^{\circ}C = 1^{\circ}C$

IP Rating IP 67

Units of Measure °C / °F Selectable

Operating Temperature $-4^{\circ}F$ to $122^{\circ}F$ ($-20^{\circ}C$ to $50^{\circ}C$) $-100^{\circ}C = 0.1^{\circ}C$, $< 100^{\circ}C = 1^{\circ}C$

Battery Type AA (LR6) x 2

Battery Life Up to 14,000 hours

Auto Power Off Off after 5 minutes

Connector Type Subminiature Thermocouple

D. Measurement Techniques

1. Controls & Functions





On / Off Key turns the 365 on for use or off. This button is also used to select between $^{\circ}\text{C}$ and $^{\circ}\text{F}$ units of measure.

To change units of measure, press and hold down the On / Off key at the time of power on. The display will show the unit of measure in the upper right corner of the display.

2. Performing Measurements

Turn the 365 on by pressing the On/Off key. The unit of measure
can be selected at this time. To change units of measure, press and
hold down the On / Off key at the time of power on. The display will
show the unit of measure in the upper right corner of the display.
Once selected, the unit of measure will remain the same after power
off.

After power on, the display will read "OPEN" if no probe is attached.

- Attach a temperature probe to the input connector observing the proper polarity.
- 3. Touch or insert the probe into the item under test.
- 4. The temperature measured at the probe will display on the 365.



E. Optional Accessories:

Part Number	Description
A365	Belt clip holder
GK11M	Bead type probe (non-food applications)
GK13M	Bead type probe (food and non-food applications)
CK11M	Surface temperature measurements

This is a partial listing of temperature probes available for the 365.

Penectration / Immersion measurements

Please visit www.tpi-thevalueleader.com for additional probes.

FK 11M

F. Troubleshooting and Maintenance

Troubleshooting

Problem

Probable Causes

Does not power up

- Dead or defective battery
- · Broken wire from battery

Temperature reads high

- snap to PCB
- · Very weak battery that will
- not turn on the low battery indicator on the LCD
- Only reads OPEN
- Temperature probe not connected
- · Temperature probe defective

Maintenance

- 1. Battery Replacement: The 365 will display a battery symbol when the internal 1.5 Volt batteries needs replacement.
 - а Disconnect the temperature probe.
 - b. Loosen the 4 battery cover screws located on the back cover
 - Remove the battery cover. C.
 - d. Remove old batteries and replace with new batteries. Observe the correct polarity.
 - Reassemble the instrument in reverse order from above e

2. Cleaning your 365:

Use a mild detergent and slightly damp cloth to clean the surfaces of the 365

365 SPECIFICATIONS

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