

# UEI INF165C

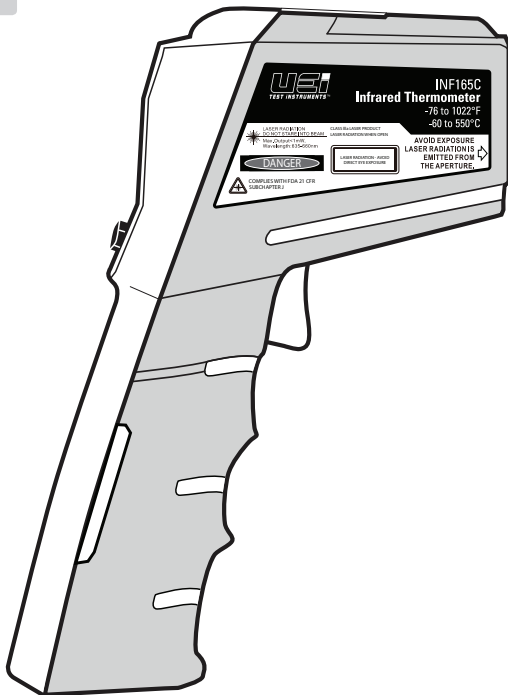
TEST INSTRUMENTS™

Visit us at [www.TestEquipmentDepot.com](http://www.TestEquipmentDepot.com)

## 12:1 Infrared Thermometer

### INSTRUCTION MANUAL

ENGLISH



## TABLE OF CONTENT

Important Safety Warnings .....	3
Symbol .....	4
Functions .....	4
Features .....	4
Overview .....	5
Operating Instructions .....	6
Specifications .....	7
Storage .....	7
Warranty .....	8
Disposal .....	8
Cleaning .....	8

## IMPORTANT SAFETY WARNINGS

### **WARNING**

Read entire Safety Notes section regarding potential hazard and proper instructions before using this tester. In this manual the word “**WARNING**” is used to indicate conditions or actions that may pose physical hazards to the user. The word “**CAUTION**” is used to indicate conditions or actions that may damage this instrument.

### **WARNING**

To ensure safe operation and service of the tester, follow these instructions. Failure to observe these warnings can result in severe injury or death.

### **WARNING**

Do not use the tester if it appears damaged.

### **CAUTION**

- When device is in use, DO NOT look directly into the laser. Permanent eye damage may result.
- Use extreme caution when operating the laser.
- Never point the tester towards anyone's eyes.
- Keep out of the reach of children.

### **WARNING**

#### **EMC/RFI**

Readings may be affected if the tester is operated within a radio frequency electromagnetic field strength of approximately 3 volts per meter, but performance of the tester will not be permanently affected.

**NOTE:** Under the electromagnetic field of 3M/m from 350MHz to 550MHz, the EMC/RFI error is 14.4°F (8°C).

## SYMBOLS

 Low battery

°F Degrees Fahrenheit

°C Degrees Celsius

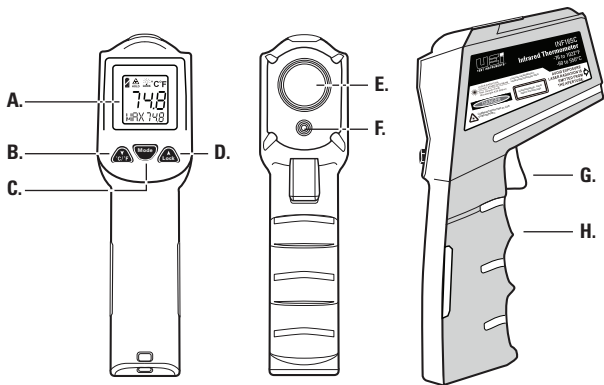
## FUNCTIONS

- Temperature range: -76° to 1022°F (-60° to 550°C)
- 12:1 Distance-to-spot ratio

## FEATURES

- Circular laser targeting
- Max value capture
- Selectable emissivity: 0.95 (default) or 0.70
- Auto power off

## OVERVIEW



- A. Display:** Press Trigger + Lock button for backlight ON/OFF function.
- MAX reading will be displayed during measurement.
- B. °C/°F Button:** Press repeatedly to switch between °C and °F. Press when tester is off to recall memory of last test.
- C. Mode Button:** Press to change emissivity (0.95 or 0.70) 0.95 is default.
- D. Lock Button:** Press Lock Button to extend Auto Power Off to 60 minutes. Default Auto Power Off is 15 seconds.
- E. Infrared Lens**
- F. Laser:** Press Trigger + Mode button for laser ON/OFF function.
- G. Trigger:** Initiates measurements (turns on Laser).
- H. Battery Cover**

## OPERATING INSTRUCTIONS

### ERROR MESSAGES

The thermometer incorporates visual diagnostics messages as below:

**ER2:** is displayed when the thermometer is exposed to rapid changes in ambient temperatures.

**ER3:** is displayed when the ambient temperature exceeds 32°F (0°C) or 122°F (50°C). The tester should be allowed plenty of time to stabilize in the working temperature.

**ER5-ER9:** For all other errors it is necessary to reset the thermometer. To reset, turn the tester off, remove the batteries, wait for a minimum of one minute, reinsert the batteries and turn the tester back on. If the error remains, contact the UEi Service Center.

**Hi/Lo:** is displayed when measured temperature exceeds the measurement temperature range in the specification section of this manual.

### Battery Replacement

When the batteries are too low for safe operation, the Low Battery  indicator will display.

- Slide the battery cover off the tester.
- Replace the batteries (AAA) 2.
- Replace battery cover.

## SPECIFICATIONS

Temperature Range	-76° to 1022°F (-60° to 550°C)
Operating Temperature	32° to 122°F (0° to 50°C)
Accuracy (Tobj=15-35°C, Tamb=25°C)	± 2.7°F (1.5°C)
Accuracy (Tamb=23 ± 3°C)	Tobj=0~550°C: ±2% of reading or 2°C(4°F) whichever is greater Tobj=-60~0°C: ±(2°C+0.05/degree C)
Emissivity	0.95 or 0.70 (default is 0.95)
Resolution	(-9.9° to 199.9° C/F) 0.2°C (0.5°F) otherwise 1° C/F
Response Time	1 sec.
Distance-to-Spot Ratio	12:1
Dimension	6.43" x 4.62" x 1.92" (163.37 x 117.33 x 48.72mm)
Weight	7.58 oz (215g) including batteries

## STORAGE

Remove the batteries when instrument is not in use for a prolonged period of time. Do not expose to high temperatures or humidity. After a period of storage in extreme conditions exceeding the limits mentioned in the General Specifications section, allow the instrument to return to normal operating conditions before using it.

## WARRANTY

The INF165C is warranted to be free from defects in materials and workmanship for a period of 1 year from the date of purchase. If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at UEi's option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect or improper maintenance. Batteries and consequential damage resulting from failed batteries are not covered by warranty. Any implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the express warranty. UEi shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss. A purchase receipt or other proof of original purchase date will be required before warranty repairs will be rendered. Instruments out of warranty will be repaired (when repairable) for a service charge. For more information on warranty and service, contact:

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

## DISPOSAL



**Caution:** This symbol indicates that equipment and its accessories shall be subject to separate collection and correct disposal.

## CLEANING

Periodically clean your meters' case using a damp cloth. **DO NOT** use abrasive, flammable liquids, cleaning solvents, or strong detergents as they may damage the finish, impair safety, or affect the reliability of the structural components.