

# TN253LF Thermometer Operating Instructions

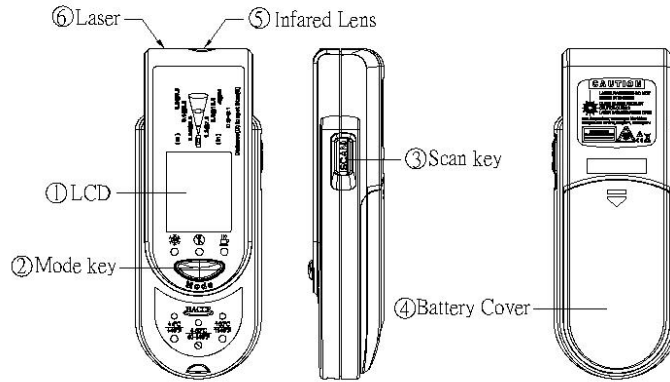
The thermometer is a non-contact infrared thermometer. Simply aim the thermometer at the target and press the 'Scan key' to display the surface temperature.

## Laser Information: (for models with Laser only)

By pressing the 'Scan key', the device will begin to measure the temperature of the target and the laser will operate.

### CAUTION!

1. WHEN DEVICE IS IN USE, DO NOT LOOK DIRECTLY INTO THE LASER BEAM—PERMANENT EYE DAMAGE MAY RESULT.
2. USE EXTREME CAUTION WHEN OPERATING THE LASER.
3. NEVER POINT THE DEVICE TOWARDS ANYONE'S EYES.
4. KEEP OUT OF REACH OF ALL CHILDREN.



## Always with the real time Max data

1. Power on: Press the "Scan. key".
2. Temperature taking: When it's power on, press the "Scan. key", will get the real time Max data immediately and the reading of measurement will be continuous updated.

## HACCP CHECK

The "HACCP CHECK" feature is incorporated in our thermometer temperature to graphically indicate critical temperature zone. The icons and LED indicators located above the display indicate a food product stays in a safe or unsafe HACCP "Danger Zone" temperature. The green and red LED light will always be lit before power off.

A Green LED appears with icon "❄️" indicates a safe cool or frozen condition below 4°C(40°F) or appears with icon "☕" indicates a safe holding temperature above 60°C(140°F).

When temperature is between 4°C and 60°C, the red LED with icon "⊘" will appear and indicate that the temperature is fallen within the HACCP "Danger Zone" from 4°C to 60°C (40~140°F).

HACCP		
❄️	⊘	☕
↓4°C ↓40°F	4-60°C 40-140°F	↑60°C ↑140°F
○	⊘	○

## °C OR °F MODE

To change the thermometer from '°C' to '°F' or from '°F' to '°C', firstly turn the instrument on by pressing the 'Scan key', then press the 'Mode key' one time, the '°C' or '°F' symbol will flash, press the 'Scan key' to change to scale.

## EMISSIVITY RANGE

The infrared thermometer is supplied with a default emissivity of 0.95. The emissivity of the thermometer can be changed from 0.05 (5E) to 1 (100E). Changes should only be carried out by experienced personnel. To change the emissivity, firstly turn the instrument on by pressing the 'Scan' button, then press the 'Mode' button two times for emissivity function. The 95E will flash on the LCD screen, then press the 'Meas.' button to adjust the emissivity value, press the 'Mode' button again to exit the set up screen. For information relating to the emissivity of specific materials, please contact the nearest retailer. Note: non-contact infrared thermometers are not recommended for use in measuring the temperature of shiny or polished metals.

## BAR DISPLAY: The fixed setting range for bar display is 20~220°C and Center=120°C.

The bar display will be updated comply with the measurement reading changed.



## LCD ERROR MESSAGES

The thermometer incorporates visual diagnostic messages as follows:

- 'Hi' or 'Lo' is displayed when the temperature being measured is outside of the measurement range.
- 'Er2' is displayed when the thermometer is exposed to rapid changes in the ambient temperature.
- 'Er3' is displayed when the ambient temperature of the thermometer EXCEEDS 0°C (32°F) OR +50°C (122°F). In both cases you should allow plenty of time (minimum 30 minutes) for the thermometer to stabilize to the working/room temperature.
- For all other error messages it is necessary to reset the thermometer. To reset the thermometer, turn the instrument off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. If the error message remains please contact the Service Department for further assistance.

## BATTERIES

The thermometer incorporates visual low battery indication as follows:

- 'Battery OK': measurements are possible
- 'Battery Low': battery needs to be replaced, measurements are possible
- 'Battery Exhausted': measurements are not possible

- ⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with AAA, 1.5V batteries. Please note: It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction.
- ⚠ Dispose of used battery promptly and keep away from children.

## STORAGE & CLEANING

The sensor lens is the most delicate part of the thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol, allowing the lens to fully dry before using it, do not submerge any part of the thermometer. The thermometer should be stored at room temperature.

## SPECIFICATION

Measurement Range	-55 to +350°C (-67~662°F)
Operating Range	0~50°C (32~122°F)
Accuracy (Tobj=15-35°C, Tamb=25°C)	+/-1.0°C (1.8°F)
Accuracy(Tobj=-33~350°C, Tamb=23±3°C)	±2% of reading or 2°C (4°F) whichever is greater
Resolution (-55.0~199.9°C)	0.1°C / 0.1°F (switchable) , otherwise 1°C/1°F
Response Time (90%)	1 second
Distance:Spot	6:1 optics ratio
Emissivity Range	0.95 default – adjustable 0.05 to 1.00 emissivity
Battery Life	Typ. 40hr, min 30hr (auto power off after 15 seconds)
Battery	AAA*2pcs
Dimensions	24.5 x 43.5 x 113.5mm(1.0×1.7×4.5 inch)
Weight	90 grams (3.17 oz)including batteries

## EMC/RFI

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

## GUARANTEED

The thermometer is guaranteed for a period of one year from the date of purchase against mechanical and electrical manufacturing defects. There are no user serviceable parts inside the instrument. Any attempted repair by unauthorized persons voids the warranty.

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