User Guide

Specs

- **Temperature Range:** -50 to 1,020°F (-10 to 549°C)
- **Accuracy:** +/- 2%
- **Response Time:** < 0.8 seconds
- **Emissivity**:** Adjustable (0.1 to 1.0)
- **Distance-to-Spot-Ratio*:** 12:1
- **Operating Temperature:** 32 to 122°F (0 to 50°C)
- **Storage Temperature:** -4 to 122°F (-20 to 50°C)
- **Power Supply:** Rechargable lithium-ion battery (pre-installed)

*The farther the target, the larger the test area is. As the distance between the test object and TempTech increases, the size of the area being measured also increases. Below is a sample using the formula used to calculate the distance-to-spot-ratio.

Distance-to-Spot-Ratio x Test Object Size in Inches = Maximum Measure Distance in Inches

e.g., 12:1 x 2" = maximum measure distance of 24".

**See the table found on the back page for emissivity values of some common materials. A more comprehensive emissivity table can be found at www.temptech.org/pages/emissivity-table.

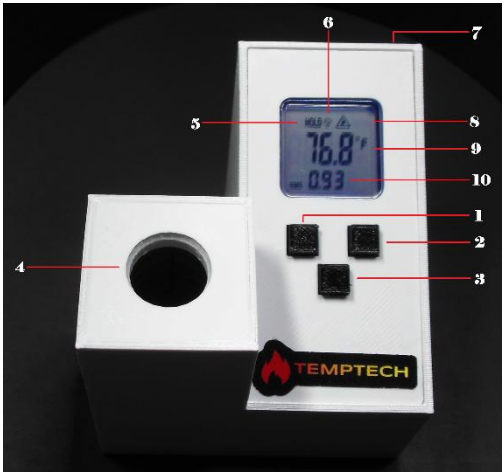

Figure 1

Figure 2

1. Fahrenheit/Celsius button
2. Backlight button
3. Function button
4. Sensor
5. Data hold indicator
6. Backlight indicator
7. Power switch
8. Low Battery Indicator
9. Current temperature reading
10. Current emissivity
11. Data scan indicator
12. Max Temperature Read

Setup

1. Charge the unit for 1-2 hours prior to first use. Once fully charged, move the power switch (7) to the “On” position.
2. To set emissivity, move the power switch (7) to the “Off” position. Then, press the function button (3) to get to the emissivity adjustment screen.
3. Use the Celsius/Fahrenheit button (1) to lower the emissivity or the Backlight button (2) to raise the emissivity. When the desired emissivity is displayed (e.g., 0.93 for quartz), press the function button (3) to save the setting.

Operation

1. Move the power switch (7) to the on position. The TempTech will begin scanning.
2. Position the sensor (4) under the target object. Keep objects above 300°F (149°C) at least 1 inch above the sensor tower to avoid damage to the case and/or sensor.
3. When temperature readings are complete, move the power switch (7) to the “Off” position. The scanning will stop. Additionally, the data hold indicator (5) and last temperature reading will be displayed on the LCD for 15 seconds until the TempTech turns off.

Additional Adjustments

While the TempTech is powered on**:**

- Press the Fahrenheit/Celsius button (1) to toggle between Celsius and Fahrenheit.
- Press the backlight button (2) to toggle the backlight on or off.

Cautions

TempTech should be protected from the following**:**

- Thermal shock (caused by large or abrupt ambient temperature changes). Allow 30 minutes for it to stabilize before use.
- Induction heaters, arc welders, and electromagnetic fields
- Objects of high temperature

Maintenance

- The outside casing of TempTech's can be wiped with a damp cloth. If heavily soiled, use a small amount of a mild detergent to loosen and remove the dirt. Then, wipe dry. The sensor tower can be lightly blown out with compressed air.
- Do not use solvent to clean the sensor.
- Do not submerge the TempTech in water.

Returns

- If, for any reason, you aren't completely satisfied with our product, return it within 7 days for a full refund. Contact us via email or the form found at www.temptech.org/pages/contact-us to get the process started.

Warranty

- TempTech's are guaranteed to be free from defects in materials and workmanship for 6 months from the original purchase date. Proof of purchase is required. Damage from misuse or abuse is not covered under the warranty. The buyer is responsible for return shipping costs. We will repair the unit and ship it back to you. If it cannot be repaired, we will replace it.
- For warranty claims, please contact us via email or the form found at www.temptech.org/pages/contact-us to get the process started.
- We reserve the right to refuse all warranty claims that cannot be substantiated as falling under the terms of this warranty statement.

Emissivity of Common Materials

Material	Emissivity	Material	Emissivity
Ceramics	0.90-0.95	Quartz	0.90-0.95
Cloth (black)	0.98	Quartz: Opaque	0.92-0.95
Glass	0.90-0.95	Snow	0.80-0.90
Ice	0.96-0.98	Stainless Steel	0.59
Paint	0.80-0.95	Water	0.92-0.96