

# **User Manual** Model TT-100

Important: Read instructions carefully before use. High, prolonged fever requires medical attention. If symptoms persist, contact your healthcare provider.

#### **Warnings and Precautions**

When using this product always follow these basic safety precautions to insure that the patch accurately reads temperature and to avoid skin irritation. Failure to follow these precautions could result in inaccurate temperature readings resulting in delay in treatment, or could result in skin irritation and mild discomfort.

- ⚠ DO NOT use the patch for any other purpose besides measuring human body temperature.
- ⚠ DO NOT place the patch over wounds, sores or abrasions.
- DO NOT excessively bend or twist the TempTrag patch.
- DO NOT immerse the patch in water. Patch may be removed for a bath or shower and then re-applied afterwards.
- DO NOT use the patch if it has been damaged or immersed in water.
- DO NOT attempt to take apart the patch; there are no user serviceable parts.
- DO NOT wear successive patches under the same arm. When removing one patch and starting another, place the second patch on the other side of the body.

Patch adhesive may irritate sensitive skin. Contact your doctor if irritation persists.

#### **Clinical Temperature Information**

Normal body temperature is not a single temperature, but a range of temperatures influenced by age, time of day, and measurement site. We recommend that you take the temperatures of your family members when they are well to establish their normal body temperature. Many people may not have an elevated temperature when they are sick. These include, but are not limited to, infants under 90 days old, people on steroids, antibiotics or antipyretics (acetaminophen, ibuprofen, and aspirin), people with compromised immune systems (including the elderly and those having HIV/AIDS). See your doctor if you feel someone is ill even if their temperature

A doctor should be consulted in the following situations where fever is present: vomiting, diarrhea, changes in appetite, activity or breathing, or with children who are irritable, lethargic or unusually sleepy.

# Welcome to **TempTraq**®, continuous temperature monitoring.

This guide is for your benefit to make sure you fully understand how to use the TempTraq® system. TempTraq® is a Bluetooth® continuous temperature monitor in the form of a one-time use, disposable patch. The patch senses, records and transmits body temperature for 24 hours via Bluetooth® Version 4.0. Temperature information from the patch is "read" using a smart device (Apple® or Android™ with Bluetooth® Version 4.0 capability running the **TempTraq** app). **TempTraq** allows your child to rest when they are ill with an elevated temperature. There is no need to disturb your child to take a temperature measurement so your child can rest and you can have peace of mind knowing your child's temperature.

#### Intended Use

The wireless thermometer, model TT-100, is a battery-operated electronic device with an intended use of measuring human body temperature precisely. This device is single-use and intended for armpit temperature measurement for persons of all age.

#### For Best Results

- Apply the patch to clean dry skin. Deodorant and lotions can reduce adhesion of the patch.
- The sensor marked "underarm" must be positioned in the center of the armpit. Wait 3 - 5 minutes for the patch to warm up to body temperature.
- The arm should be relaxed along your side to enclose the **TempTraq** sensor in the armpit. Temperature measurements can be affected by cold ambient temperatures.
- Temperature data from the patch can be read up to 40 feet away depending upon objects between the patch and the smart device, and the position of the patch on the body. For improved performance, move the smart device closer to the patch.
- For iOS devices, the TempTraq app must be open and visible on screen to receive temperature data from the patch.

#### TempTraq Temperature Measurement

**TempTraq** measures under-the-arm "axillary" temperature and converts this temperature to display body temperature which is equivalent to a temperature measurement taken orally.

#### **Fever Guidance**

The **TempTraq** app uses color coding to aid the user:

indicates a temperature is in the normal range.

indicates a possible fever of 100.4°F (38.0°C) or higher.

indicates a temperature equal to or higher than the alert temperature that you selected.

# **Troubleshooting Guide**

Problem	Troubleshooting Hints
Patch ID is not visible in the Select Patch list when adding the patch	Patch may not be activated. Press button on patch to activate.
App is showing "Out of Range" for a patch	Move the smart device running the TempTraq app closer to the patch. The patch can send temperature data up to 40ft. This distance is reduced by walls and objects between the patch and the smart device.  For iOS devices, the app must be open and visible on screen to receive data from the patch.
Temperatures from the patch are lower than expected	Check to make sure that the patch is properly positioned with the sensor - marked "underarm" - correctly positioned in the armpit as shown in the instructions for use.  Lower than expected temperature readings can also be caused by exposure to cold ambient temperatures, for example, when the arm is raised exposing the patch to cold ambient temperatures.  Confirm the patch is correctly reading temperature by measuring oral temperature with a digital thermometer.
Temperatures from the patch are higher than expected.	Confirm the patch is correctly reading temperature by measuring oral temperature with a digital thermometer.
No audible alert is received from the smart device when the device is out of range or when a temperature alert is generated.	Check to insure that the phone volume is set to an audible level and is not set to mute.  Check settings for the app to insure that notifications are enabled and sound is enabled for notifications.  Note that the audible alert only sounds for a short period. The visual notification remains active in the app until canceled by the user.
No alert is received when temperature measured by the patch exceeds the user set alert level.	Check to make sure that the smart device running the app is in range of the patch. A temperature alert will not be generated if the smart device is out of range of the patch.      Check to insure that the app is running. No alerts will be generated if the app is not running.
App displays "Patch Error"	<ul> <li>Patch is not functioning correctly and needs to be replaced. Follow on screen instructions to contact Customer Care at 1 (440) 249-5440 for return instructions.</li> </ul>

# **Specifications**

Model Number	TT-100
Patch Dimensions	Length: 99.2mm, Height: 49.2mm, Thickness: 2.5mm
Patch Weight	4.5 grams
Patch Operating Life	24 hours
Patch Environmental Conditions	
Transport and Storage	$^{-4}$ to 122 °F (–20 to 50 °C) / 15 $^{-}$ 95% RH (non-condensing) / atmospheric pressure range of 700 hPA to 1,060 hPA
• Use	61 to 104 °F (16 to 40 °C) / 15 - 95% RH (non-condensing) / atmospheric pressure range of 700 hPA to 1,060 hPA
Temperature Measurement Location	Axillary (under the arm) - app converts axillary temperature to body temperature which is equivalent to temperature measurement taken orally
Temperature Range	87.0~°F - $109.3~°F$ ( $30.6~°C$ - $42.9~°C$ ). Temperatures below this range will be displayed in the app as "Lo". Temperatures above this range will be displayed in the app as "Hi".
Temperature Indications	Less than 100.4 °F (38.0 °C) - GREEN Equal to or greater than 100.4 °F (38.0 °C) - ORANGE Equal to or greater than the user defined alert temperature - RED
Accuracy	Conforms with ASTM E1112-00 (2011); +/- 0.1 °C or +/- 0.2 °F over the temperature range of the device
Display Resolution	0.1 °F (0.1 °C)
Response Time	Once applied to the underarm, the patch requires up to 5 minutes to reach a stable reading
Transmission Distance	Patch will transmit up to 40 feet when applied to the underarm
Compatible Smart Devices	Smartphones and tablets with Bluetooth® 4.0 running Apple® operating system iOS 7.1 or later or Android™ operating system 4.3 or later. Visit temptraq.com for a list of compatible devices.
Standards	ASTM E1112-00 (2011) standard for electronic thermometers IEC 60601-1 Medical Design Standards, 3rd Edition IEC 60601-1-2 Electromagnetic Compatibility Bluetooth® Version 4.0
Radio Regulations	FCC Part 15 Industry Canada License exempt RSS standard(s) ISO/IEC 60601-1-2 Electromagnetic Compatibility
Water Ingress Protection	IP24 - Protected from damage due to water splashing on the product.

# **Additional User Information**



#### IMPORTANT: Read instructions carefully before use.



Type BF Applied Part

WARNING: No modification of this equipment is allowed. The device or its components are not intended to be serviced, replaced, or repaired.

Device is powered by a 3V non-rechargeable battery. Not intended to be recharged, serviced, replaced, or repaired. The device is single use only. Do not reuse May be safely applied to self or used on others.

May be discarded in common household waste.

#### Warranty **FCC Statement and Legal Notices**

TempTraq warrants each new TempTraq patch against defects in materials or workmanship until the expiration date of the product, and agrees to replace any defective product without charge.

#### IMPORTANT:

This warranty does not cover damage resulting from accident, misuse or abuse, or lack of reasonable care. No responsibility is assumed for any special, incidental or consequential damages. In order to obtain warranty replacement, simply call TempTraq Customer Care at 1 (440) 249-5440 for return instructions, or email info@temptraq.com.

### NOTE:

No other warranty, written or verbal is authorized by **TempTraq**. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion and limitations may not apply to you.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference and (2) this device must accept any interference received including interference that may cause undesired operation FCC WARNING: any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment under FCC regulations.

NOTE: this equipment has been tested and found to comply with the limits for a Class B diaital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and received
- Connect the equipment into an outlet on a circuit different from that to which Consult the dealer or an experienced radio/TV technician for help.

P/N: TT-100-201 Rev 1

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Protected by U.S. Patent Nos. 8,029,927;8,268,475;8,722,235. Other foreign patents pending All other trademarks are property of their respective owners.

# **Need More?**

TEMPTRAQ.COM VISIT

> CALL 1 (440) 249-5440

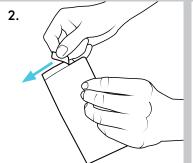
EMAIL info@temptraq.com

# **Get Started**



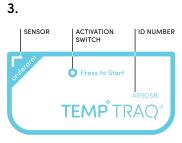
#### DOWNLOAD AND INSTALL APP

The  $\bf TempTraq$  app can be downloaded from the App Store  $^{\rm SM}$  or Google  $\bf Play^{\rm TM}$  store.



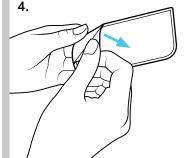
#### OPEN PACKAGING

When you are ready to use **TempTraq**, open the foil packaging and remove the patch. Be careful not to excessively bend the patch.



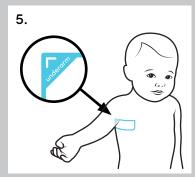
#### **ACTIVATE PATCH**

Squeeze the area marked by "Press to Start" between the thumb and forefingers to activate the patch. You will feel the switch "click" when you have successfully activated the patch.



REMOVE BACKING

Remove the backing from the patch just prior to application.



#### **APPLY PATCH**

Apply the patch directly under the arm with the sensor – the corner marked "underarm" – in the center of the armpit. The patch can be placed on either side of the body. The <code>TempTraq</code> logo should be in an upright position.

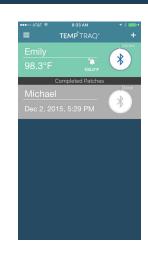
# Start App

Open the app on your smartphone. Please take time to review an in-depth video on the use of **TempTraq**.



### Add a New Patch

As soon as the patch is started and applied to your child, it immediately begins monitoring body temperature. To monitor your child's temperature with the app, you will need to add a new patch by selecting the "+" sign in the upper right of this screen.



#### Add a New Patch

Enter your child's name; then enter an alert temperature. The app indicates a possible fever for temperatures of 100.4 °F (38.0 °C) or higher. In addition, you may enter an alert temperature for when you want the app to alert you. Next, select a patch by choosing the ID number that corresponds to the ID number on the patch on your child. Select "Save" to set up the patch.

**NOTE:** To switch between Celsius and Fahrenheit, choose the appropriate selection within settings for the **TempTraq** app.



#### Patch List

This is your patch list, which shows a status bar for each active patch. Within each status bar, you will find the current temperature of each child, the child's alert temperature and the time remaining for the patch. Within the circle, the Bluetooth® symbol will pulse whenever new data is received from the patch. To edit or delete a patch, swipe the status bar from right to left on iOS devices, and long tap the status bar on Android devices. Patches that have completed their 24 hour monitoring period are also shown on this screen and their data is retained in the app until you delete it. Tap on the status bar to navigate to the Patch Detail screen.



# Patch Detail

The Patch Detail screen shows your child's current temperature, the alert temperature, and time remaining for the patch. The graph at the bottom of the screen illustrates your child's temperature over time. Use pinch and zoom to view portions of the graph in more detail. The app uses colors to show the current temperature status for each child.



GREEN indicates a temperature that is in the normal range



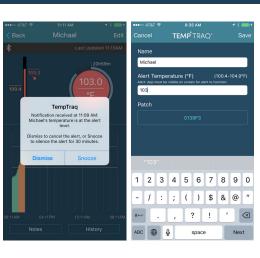
ORANGE indicates a possible fever of 100.4 °F (38.0 °C) or higher



RED indicates a reading equal to or higher than the user alert temperature (ex. 103.0 °F)

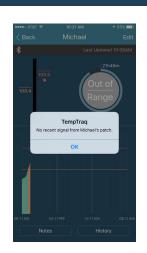
# Alert Notification and Alert Temperature

If your child's temperature is equal to or greater than the user selected alert temperature - 103.0 °F in this example - the background color within the circular display for current temperature will change to red and your device will receive an alert notification. Select "Snooze" to silence the alert for 30 minutes. If your child's temperature is still above the alert level at the end of the 30 minute snooze period, you will receive another alert. If your child's temperature falls below the alert temperature during this 30 minute snooze period, the alert notification will be canceled. Choose "Dismiss" to cancel the alert.



# Patch Out of Range

When the smart device running the **TempTraq** app has not received a signal from the patch for more than 15 minutes, the app will alert you, and will display "Out of Range" in place of current temperature. To correct an "Out of Range" condition, try moving your smart device closer to the patch until you once again begin to receive current temperature data. For iOS devices, the app must be open and visible on screen to receive data from the patch.



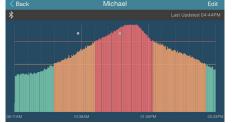
# **Adding Notes**

The **TempTraq** app allows you to add notes to your child's temperature history by selecting the "Notes" button at the bottom of the Patch Detail Screen. Select "+" to add a note. You can choose from three preset events – medication, bath, or feeding – or create a custom note. Select the date and time that corresponds to the event or note and then press "Save" to save the note. Notes will be listed on this screen for review and editing and can be exported by tapping the export icon. A note icon is also added to the temperature history graph for each new note. Tap a note icon on the graph at any time to navigate to this Notes screen.



# **Graph View and Table View**

When in the Patch Detail screen, turn your smart device horizontally to display an expanded graph. Use pinch and zoom to view portions of the graph in more detail. Rotate your smart device back to vertical to return to the Patch Detail screen.





When in the Patch Detail screen monitoring an individual patch, select the "History" button to view a list of temperature measurements for a more detailed look at the temperature changes over time. You may also tap the icon in the upper right of this screen to export data via e-mail. The data is sent as a .csv file which can be viewed in Microsoft® Excel®.

# Patch Done

The patch stops measuring after 24hrs at which point it no longer sends the current temperature to the app. It will continue to send the complete temperature history for an additional 24 hour period. The app shows the word "Done" to indicate that the 24 hour period of monitoring is completed. The data for the patch is retained in the app until you delete it.

