

# TC-25+ TEMPCHECK Rapid ResponseThermometer



#### PRODUCT DESCRIPTION:

The TC-25+ TEMPCHECK Rapid Response Thermometer is a unique digital temperature verification system for blood, red blood cells (RBC), platelets, fresh frozen plasma (FFP - stored and thawed), cryoprecipitates (cryo), and other bagged biologics. Designed for hospital or laboratory use, the noninvasive CAP-TRM42470-compliant TC-25+ TEMPCHECK thermometer ships with a NIST-traceable "Certificate of Calibration" and eliminates the need for inaccurate, slow-responding "stick-on" temperature indicators. When bagged blood products are used for transfusion, delivered to blood banks, or removed from, or returned to, cold storage refrigerators, temperature must be verified. The bag is placed directly onto the TC-25+ TEMPCHECK's flatbed base incorporating a specially designed rapid response embedded temperature sensor. In 15-30 seconds, the bulk temperature of the bag is displayed on the easy-to-read, angled display screen.

Do you want to verify that the temperature of a product bag is within the required range? Manual+ and Go/No Go modes automatically determine the temperature and trigger visual and/or audio alarms if it is out of range. Have a batch of bags that need to be labeled or packaged? Monitor mode continuously checks the temperature of one of the bags while the others are processed. If the temperature of the sample bag drifts outside of the required range during the batch processing period, then audio and visual alarms will inform the technician that the batch of bags must be returned to storage immediately to maintain temperature within the required range.

The TC-25+ TEMPCHECK is compatible with standard USB healthcare barcode readers. Stream out the bag's barcode and temperature through a USB output port, or alternatively, record the bag's barcode and temperature on the TC-25+ TEMPCHECK's SD card. For lightweight portability or operation during a power outage, the TC-25+ TEMPCHECK Rapid Response Thermometer includes a 3.6V LiPo rechargeable battery offering more than 7½ hours of temperature display running time. When operating on battery, the TC-25+ TEMPCHECK will shut down to conserve battery life after 4 minutes of inactivity. Simply press and hold the POWER/EXIT button to reactivate the temperature display. The battery automatically recharges when the TC-25+ TEMPCHECK is connected to line power.

#### **FEATURES**:

- Non-invasive temperature verification of whole blood, red blood cells (RBC), platelets, fresh frozen plasma (FFP), cryoprecipitatesNon-invasive temperature verification of blood, RBC, platelets, FFP, cryo, and other bagged biologics
- Rapid response time: 15 to 30 seconds
- Tightly targeted temperature range (0.0 40.0 °
  - C) providing <±0.2 °C accuracy
- Angled, easy-to-read backlit display with 0.1 oresolution
- User selectable temperature scale: °C or °F
- 8 sets of programmable high and low temperature alarm setpoints
- Optional USB input from barcode readers
- Optional USB output of barcode and temperature
- Optional SD card recording of barcode and temperature
- >7.5 hours LiPo rechargeable battery backup

### **APPLICATIONS:**

- Manual+: LED indicators if temperature is out of range
- Go/No Go: audio and visual alarms if temperature is out of range
- Continuously Monitor temperature of one bag while others are being batch processed
- Temperature verification of packaged blood bags containing blood, RBC, platelets, FFP, and cryo
- Temperature verification of blood bags upon delivery to blood banks
- Temperature verification of plasma and platelet bags in operating rooms and blood banks

For audio and visual temperature alarms when labeling or packaging batches of bags, see the TC-25+ TEMPCHECK.









# TC-25+ TEMPCHECK Rapid Response Thermometer

## Specifications:

| Temperature Sensor & Display |   |   |
|------------------------------|---|---|
| Sensor                       | Type K rapid-response thermocouple on an insulated pad                    |   |
| Temperature Response Time    | 15 – 30 seconds   |   |
| Display Resolution           | 0.1 °C or °F  |   |
| Temperature Scale            | °C  | °F  |
| Temperature Range            | 0.0 °C to 40.0 °C   | 32.0 °F to 104.0 °F   |
| Accuracy                     | ±0.2 °C   | ±0.4 °F   |
|                              | Line Power  | Temperature display active when TC-25+ has line power.  |
| Temperature Display          | Battery Power   | Press and hold POWER/EXIT button to activate temperature display for four minutes.            |
| Port                         | Port Type   | Input/Output  |
| Barcode Reader               | Input, USB Type-A   | Barcode alpha-numeric (ASCII)   |
| USB Output                   | Output, USB Type-B  | Barcode alpha-numeric, date-timestamp, temperature, etc.                                      |
| SD Card                      | Output, SD/MMC  | Record barcode alpha-numeric, date-timestamp, temperature.                                    |
| Power                        | Load  | Supply  |
| Power Requirements           | 12 VDC, 1 A, 12 W   | 100-240 VAC (fluctuation <150 mV peak-to-peak),<br>50/60 Hz, <0.35 A RMS @ 115 VAC, UL listed |
| Battery Backup               |   |   |
| Rechargeable                 | 1-cell, 3.6 V LiPo, battery charge regulator (BCR), >7.5 hours active use |   |
| Mechanical                   |   |   |
| Mounting                     | Sits on benchtop, 4 ea. stiff rubber insulating feet                      |   |
| Dimensions, WxHxD            | 15.2 x 5.2 x 23.1 cm (6.0 x 2.1 x 9.1 in.)                                |   |
| Weight                       | 466 g (1.0 lb.)   |   |
| Case                         | ABS plastic   |   |
| Environmental Conditions     |   |   |
| Facilities                   | Intended for indoor (laboratory) use                                      |   |
| Altitude                     | Up to 2,000 meters (6,600')   |   |
| Ambient Temperature Range    | 15 °C to 32 °C (59 °F to 90 °F)   |   |
| Maximum Relative Humidity    | 60% (15 °C to 32 °C)  |   |
| Ventilation                  | Compliance with ANSI/ASSP Z9.5-2022 recommended.                          |   |
| Pollution Degree             | POLLUTION DEGREE 2: only non-conductive pollution occurs.                 |   |

**One-year warranty on all Hampshire Controls products.** 





