TempTale® Ultra Probeless Dry Ice Temperature Monitor

Instructions for Use







The TempTale_® Ultra Probeless Dry Ice temperature monitor can be programmed with custom start-up delays, measurement intervals, and time-temperature alarm settings.

Starting a TempTale® Ultra Probeless Dry Ice Monitor

- · Prepare your container for shipment according to your Standard Operating Procedure (SOP) for dry ice pack outs.
- Press and hold the Start button (1 3 seconds) until the Sunshine icon appears on the LCD screen (1).
 The LED (2) will blink GREEN to indicate that the monitor has been started.
- · The monitor will begin to record temperature data after the programmed start-up delay period has passed.

Marking an Event and Reading Data on the LCD Screen

- To mark an event while the monitor is recording, press and release the Start button. An Arrow I icon will appear briefly at the top of the LCD screen and trip summary data will appear. Press and release the Start button to cycle through the trip summary data. Data appears in the following order:
 - 1. Average temperature (AVG)
 - 2. Minimum temperature recorded (MIN)
 - 3. Maximum temperature recorded (MAX)
 - 4. Total time above high limit (A day/hr/min)
 - 5. Total time below low limit (\(\neg \) day/hr/min)
 - 6. Current temperature reading (If this LCD option is enabled)



When the TempTale Ultra Probeless Dry Ice monitor is exposed to temperatures outside the programmed alarm limits, an will appear at the top of the screen. The icon will display if the high alarm was triggered. The vicon will display if the low alarm was triggered.

Stopping and Receiving a TempTale Ultra Probeless Dry Ice Monitor

There are two ways to stop a TempTale Ultra Probeless Dry Ice monitor:

- Press and hold the Stop button (1 3 seconds) until the Stop icon appears in the
 upper right corner of the screen.
- Plug the monitor into a USB port on a computer.
 NOTE: If the monitor is not stopped manually, it will continue to record data.
- There are three pre-programmed LED options to indicate the monitor has been stopped:
 - 1. LED will blink GREEN (OK) or RED (alarmed) depending on alarm status
 - 2. LED will blink **RED** only, to indicate monitor has been stopped
 - 3. No LED will blink if the "Stop LED" option was disabled

Typical use assumes that the monitor is exposed to extremely low temperatures of -80°C (-112°F). Consequently, the monitor requires a warm-up period of 5–10 minutes for the LCD display to resume proper operation and for the protective silicon cap to be removed from the USB connector.

Accessing TempTale Ultra Probeless Dry Ice Monitor Data Files

After the monitor is stopped, plug the monitor into a USB port on the computer. The LED will blink **RED** while the Adobe® PDF report and TTV data file are being created. When the **RED** LED stops blinking and displays solid **GREEN**, the file generation process is complete. The files are now accessible. (Windows® 7, 8.1, and 10).

NOTE: Do not disconnect the monitor from the USB port while the RED LED is blinking.

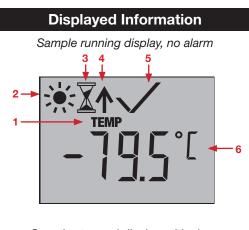
Managing and Viewing TempTale Ultra Probeless Dry Ice Monitor Files

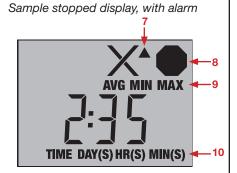
- If the computer has Adobe PDF compatible reader software installed, double-click the PDF file icon to open and view the PDF file.
- If the computer has Sensitech's TempTale Manager® Desktop Software installed (8.3 or higher), double-click the TTV file icon to open and view trip summary statistics and the time-temperature graph.
- Both the PDF and TTV files can be copied, saved, or emailed as an attachment.

Direct USB Printing of PDF Reports

- To place the monitor in Direct Print mode, press and hold the Start and Stop buttons simultaneously until the RED LED starts blinking. The monitor is now in Direct Print mode.
 NOTE: Direct Print mode times out after approximately 10 seconds. If time out occurs before the monitor is connected to a USB port, repeat the previous step.
- While the LED is blinking, plug the monitor into the USB port located on the exterior of a USB-enabled printer, and then print the PDF report.
 NOTE: Not all USB printers support USB-direct printing of PDF documents. Consult your
 - *NOTE:* Not all USB printers support USB-direct printing of PDF documents. Consult you printer's user manual for support.







- 1. Temperature display indicator
- 2. Running
- 3. Start-up delay
- 4. Marked point
- 5. Alarm Status $\chi = alarm(s), \sqrt{= no alarm(s)}$
- Current temperature (pre-programmed to display °C or °F)
- 7. Alarm triggered ▲ HIGH / ▼ LOW
- 8. Stopped recording
- 9. Avg/Min/Max temperatures recorded
- 10. Total time above/below alarm limits