

# TempTale®4 USB

## Dry Ice Monitor

### Complete Control of Your Dry Ice Environment

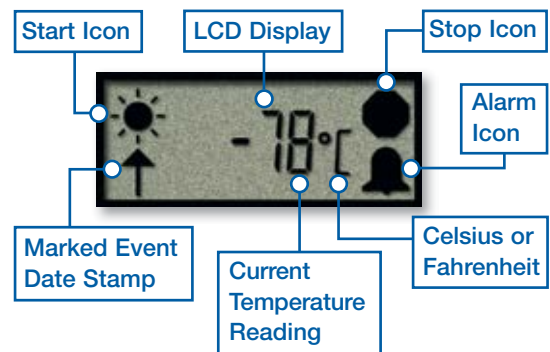
**Fast, simple, efficient and secure cold chain visibility**

Sensitech's TempTale®4 USB Dry Ice temperature monitor can be used to record and monitor cold chain shipment and storage processes of blood plasma, pharmaceuticals, frozen tissue and dry ice shipments where temperatures can reach as low as  $-80^{\circ}\text{C}$  ( $-112^{\circ}\text{F}$ ). Other applications include ultra-low temperature equipment validation such as plasma and red cell freezers, ultra low temperature freezers and shipping containers. The TT4 USB Dry Ice monitor is a self-contained, battery powered electronic monitor that can be placed directly into dry ice containers and packaging, without the need for external probes or wires.

Monitoring the cold chain throughout complex supply chains is made easy with the TT4 USB Dry Ice monitor. Combining Sensitech's industry-leading temperature monitoring technology with USB 2.0 PC communications and a powerful on-board microcontroller enables access to time-and-temperature data without the need for proprietary software and hardware readers.

Plug the TT4 USB Dry Ice monitor into a PC's USB port and the monitor will automatically create a time-and-temperature information report in Adobe® PDF format. Viewable using any Adobe compatible reader program, the report provides a complete cold chain trip history, allowing for rapid on-site shipment dispositions. Through e-mail or other file sharing capability, any interested party can instantly and effortlessly review shipment information.

The TT4 USB Dry Ice monitor also creates an encrypted data file (.txx format) compatible with Sensitech's TempTale Manager Desktop (TTMD) PC software and Internet-enabled application, ColdStream® Cold Chain Manager (CCM). The .txx data file format enables secure data transfer, aggregation, analysis, and data storage in support of 21 CFR Part 11 compliance and quality assurance requirements.



# TempTale<sup>®</sup>4 USB

## Dry Ice Monitor

Specifications	
<b>Temperature Measurement Range</b>	-80°C to +30°C (-112°F to +86°F)
<b>Temperature Accuracy Range</b>	±1.7°C from -80°C to +30°C (±3°F from -112°F to +86°F)
<b>Temperature Resolution</b>	0.1°C/F over full temperature measurement range
<b>Data Memory Type</b>	Non-volatile 16K EEPROM
<b>Data Storage Capacity</b>	16,000 data points (16K)
<b>Battery Life/Type</b>	1-year shelf life/7.2 V lithium battery
<b>Data Sampling Interval</b>	Programmable from 10 seconds up to 15 minutes
<b>Start-Up Delay</b>	Minimum – 0 seconds Maximum – 10 days
<b>LCD Display</b>	Display temp values in °C or °F
<b>Start Up Options</b>	Manual push button or automatic launch option
<b>Alarm Function</b>	Programmable high and low limits; Alarm is triggered when temperature exceeds set limits
<b>Typical Dimensions</b>	3.95" L x 2.18" W x 1.26" H (10.0cm L x 5.5cm W x 3.2cm H)
<b>Weight</b>	4.3 oz., 121.90 grams
<b>Maximum Recording Period</b>	30 days
<b>Quality Assurance Certifications</b>	CE Mark; Calibration Traceable to NIST; <sup>®</sup> RoHS, WEEE
<b>Compatible Software</b>	TempTale Manager Desktop Software; Adobe Reader
<b>Computer Interface</b>	USB 2.0, A-Type plug
<b>Monitor Recording Options</b>	Single Use Only

*Operating the monitor outside of published specifications may affect the accuracy of the data and the standard operation of the monitor.*



*Adobe PDF  
cold chain data  
report with password  
security protection*

## Features and Benefits

- Designed to accurately record, monitor and archive temperature data of mission critical dry ice shipments
- Easy-to-use “plug-n-play” operation
- No proprietary software required at shipment destination
- Integrated USB connector; no hardware or interface cable required
- Automatic generation of Adobe PDF cold chain data report allows prompt on-site decision making
- Monitor can be placed directly into the dry ice environment, directly in contact with product

Sensitech Inc. is a leading provider of supply and cold chain visibility solutions that enable our customers – global leaders in the food, life sciences, and industrial markets – to track, monitor and protect the quality and integrity of their temperature-sensitive products across complex supply chains. Through its logistics security division, FreightWatch International, Sensitech also offers origin-to-destination services that provide customers with real-time cargo transparency, helping them to mitigate such risks as theft, diversion, counterfeiting, and chain of custody. Sensitech Inc. is an ISO 9001:2008 company based in Beverly, Mass., with more than 36 sales, service and distribution locations around the world. Sensitech is a part of UTC Climate, Controls & Security, a unit of United Technologies Corp., a leading provider to the aerospace and building systems industries worldwide. Visit [www.sensitech.com](http://www.sensitech.com) for additional information. © 2016. Sensitech Inc. All Rights Reserved. Unless otherwise indicated, all trademarks and service marks are the property of Sensitech Inc. NIST is a registered trademark of The National Institute of Standards and Technology Agency of the United States Government. Adobe is a registered trademark of Adobe Systems Incorporated.