

TempTale®4

Multi-Alarm Monitors

Cold Chain Monitoring in a Changing Regulatory Environment

Driven by global regulatory and standards-based guidance documents, the life science industry is under greater scrutiny to document the storage, handling, and distribution of temperature-sensitive medicinal products and ensure product quality and patient safety. The Sensitech® TempTale®4 (TT4) Multi-Alarm monitors deliver extremely precise, targeted temperature monitoring to help ensure compliance with these emerging global regulations.

Mitigate Risk with TT4 Multi-Alarm Monitors

TempTale®4 Multi-Alarm temperature monitors help to mitigate the overall risk associated with “alarmed” shipments when monitoring temperatures based on stability data. By monitoring for “allowable” temperature excursions, the related high costs of quarantining, investigating, and documenting shipments outside of label claim can be greatly reduced.

Highly Advanced and Flexible Alarm Design

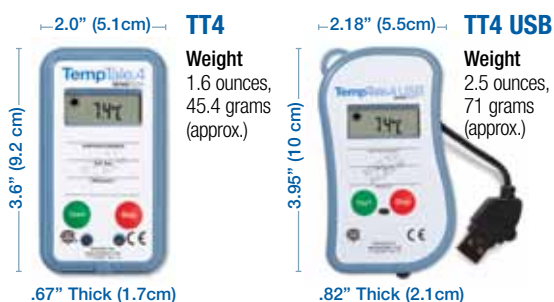
TT4 Multi-Alarm monitors offer a highly advanced and flexible alarm design that provides users with the ability to program up to six (6) independent time-and-temperature alarms which can be any combination of four (4) different alarm types:

- Single temperature limit (high or low)
- Temperature range consisting of a lower and upper temperature limit
- Two separate temperature ranges linked to the same time threshold
- Time-only alarm

*Time thresholds can be configured as continuous or cumulative time events

Choose the Model that Best Fits Your Application

Our advanced multi-alarm feature is available in both the TT4 and TT4 USB models.



TT4 Multi-Alarm Specifications

Single-Use Overwrite and Multiple-Use Options	Overwrite/change pre-configured profile one or multiple times
Temperature Measurement Range	-30°C to 70°C
Temperature Accuracy Range	±1.0°C from -30°C to -10°C ±0.5°C from -10°C to 45°C ±1.0°C from 45°C to 70°C
Temperature Resolution	0.1°C over full temperature measurement range
Memory Capacity	16,000 data points
Battery Life/Type	1-year run life/3.6v lithium battery
Data Sampling Interval	Programmable from 10 seconds up to a maximum of 2 hours
Programmable Alarms	Maximum of 6 alarms using any combination of 4 alarm types
Alarm Types	High/low temperature limit; Single temperature range; Dual temperature range; Time-only
LCD Indicators	OK and Alarm status; Trip summary (avg., min., max.); Time remaining/time elapsed on threshold counter; Current temperature display (last temperature recorded)
Quality Documentation and Validation Tools	Integrated NIST® traceable and 3-point Certificate of Validation; Validation Manual
Data Analysis and Monitor Configuration Software	TTMD 7.0 or ColdStream® CCM 1.5
FAA Compliance	RTCA/DO-160

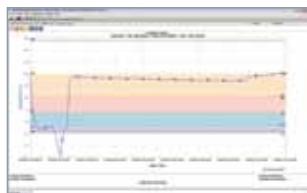
TempTale® Manager Desktop 7.0 Software

TempTale® Manager Desktop (TTMD) 7.0 is a robust, multi-lingual, Windows®-based desktop application that is used for configuring, downloading, displaying, reporting, and archiving time-and-temperature data collected from TT4 Multi-Alarm temperature monitors. TTMD software is compatible with Windows® 7 (32 and 64-bit), Windows Vista® (32 and 64-bit), and Windows XP® operating systems. TTMD software's extremely intuitive

Desktop Software

user interface makes it easy to retrieve, display, and analyze trip data, helping users to make higher quality shipment disposition decisions and ensure that Standard Operating Procedures (SOPs) are delivering acceptable results. TTMD software's extensive multi-language support and powerful data export and transfer options allow users to quickly and easily share data globally.

Software Features



◀ **Graph View** implements graphing controls and tool tips to allow for easy viewing of alarm profiles

◀ **Tabular View** lists information for each data point, displaying the date, time and temperature, including secondary sensor data (e.g. humidity readings)



◀ **Summary View** automatically calculates temperature profiles of all configured alarms

TTMD 7.0 Enhancements

- Supports download/configure of TT4 Multi-Alarm monitors
- Calculates and displays summary statistics for each configured alarm
- Graphing controls allow users to easily view configured alarms individually or collectively
- Backwards compatible with all existing TT4 monitors, Interface Plus readers and existing TT4 data files
- Print any number or combination of reports from a single print dialog box
- Multi-language support in 10 different languages including: US English, UK English, Spanish, Dutch, French, German, Portuguese, Chinese, Japanese, and Russian
- View and print NIST traceable 3-Point Certificate of Validation
- Automatic file export to PDF and Microsoft® Excel
- Program monitors with saved configuration profiles to facilitate programming accuracy and efficiency
- Draw objects and add text to graphs for commenting and marking data

ColdStream® Cold Chain Manager 1.5

ColdStream® Cold Chain Manager (CCM) is a validated, hosted and secure relational database application easily accessible via the Internet for query, reporting, and analysis of stored data. ColdStream CCM enables users to share critical data quickly and efficiently through password protected, selective access—across their own organization as well as with business partners.

Web-enabled Application

ColdStream CCM provides centralized storage for time-and-temperature records in a secure, 21 CFR Part 11 compliant repository. The hosted database application enables robust cold chain data analysis, reporting, and potential opportunities for process improvement. The reporting and analysis services are delivered through Sensitech's Professional Services team.

As the world's leading provider of cold chain visibility solutions, Sensitech Inc. enables global leaders in the food, pharmaceutical, and industrial markets to track and monitor assets across the supply chain in order to protect the integrity of temperature-sensitive products. Sensitech is an ISO 9001:2008 company based in Beverly, Mass., with offices in Amsterdam, Calgary, Melbourne, Mumbai, Redmond, Santiago, and Shanghai, and additional service and distribution locations around the world. Sensitech is a wholly owned subsidiary of Farmington, Conn.-based Carrier Corp., the world's leader in high technology heating, air-conditioning and refrigeration solutions with operations in 172 countries. Carrier Corp. is a unit of United Technologies Corp. (NYSE:UTX), a Hartford, Conn.-based provider of a broad range of high technology products and support services to the aerospace and building systems industries worldwide. For additional information, please call +1-978-927-7033 or visit www.sensitech.com. © 2011. Sensitech Inc. All Rights Reserved. Unless otherwise indicated, all trademarks and service marks are the property of Sensitech Inc. Windows, Windows XP, and Windows Vista are registered trademarks of Microsoft Corporation in the United States and other countries. NIST is a registered trademark of The National Institute of Standards and Technology Agency of the United States Government.

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