

# TempTale<sup>®</sup>4 BIO

SENSITECH<sup>®</sup>

Maintain precise control of temperature-sensitive pharmaceuticals and biologics

## TempTale<sup>®</sup>4 BIO (TT4 BIO) Monitor

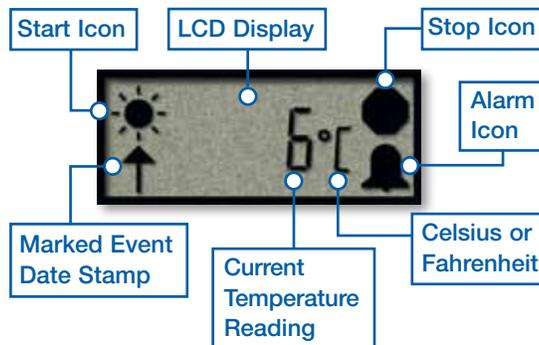


The TempTale<sup>®</sup>4 BIO (TT4 BIO) is a compact, battery powered ambient electronic temperature monitor designed with a higher degree of accuracy to meet critical pharmaceutical applications for monitoring temperature-sensitive products during storage and transportation. The TT4 BIO helps to assure the quality, safety and efficacy of temperature-sensitive products in storage and transit by

accurately monitoring and recording environmental conditions experienced by pharmaceuticals and biologics throughout the entire cold chain.

*With its enhanced accuracy (see specifications) the TempTale4 BIO can significantly improve the efficiency and quality of shipment dispositions, thereby reducing operating costs while effectively managing risk with both FDA and internal inspections.*

In addition to the strict quality control methods we use in the design, test, production and service of our monitors, a NIST<sup>®</sup> traceable validation certificate is provided with every TempTale4 BIO monitor we ship.



## Specifications

Temperature Measurement Range	-30°C to 70°C
Temperature Accuracy Range	±1.1°C from -30°C to -18°C ±0.55°C from -18°C to -1°C <b>±0.22°C from -1°C to 10°C</b> ±0.55°C from 10°C to 50°C ±1.1°C from 50°C to 70°C
Temperature Resolution	0.1°F/C over full temperature measurement range
Memory Type	Non-volatile 2K or 16K EEPROM Options
Data Storage Capacity	1,920 or 16,000 data points
Battery Life/Type	1-year run life/3.0v lithium battery
Data Sampling Interval	Programmable from 10 seconds up to a maximum of 2 hours
Water Resistance Casing	NEMA 6 Rating
Start-Up Delay	Minimum 0 seconds up to maximum 194 days
LCD Programmable Options	Display current temperature reading, display temp values in °F or °C, Enable flashing of start, stop and alarm icons
Start Up Options	Manual push button or automatic launch option
Alarm Function	Programmable high and low limits; alarm is triggered when temperature exceeds set limits
Typical Dimensions	3.6" L x 2.0" W x 0.67" H (9.2cm L x 5.1cm W x 1.7cm H)
Weight	1.6 ounces, 45.4 grams (apprx)
Quality Assurance Certifications	CE Mark by TUV; Traceable to NIST
Software/Computer Interface	TempTale Manager <sup>®</sup> Desktop Software; Interface Plus Reader

## TempTale Manager<sup>®</sup> Desktop Software

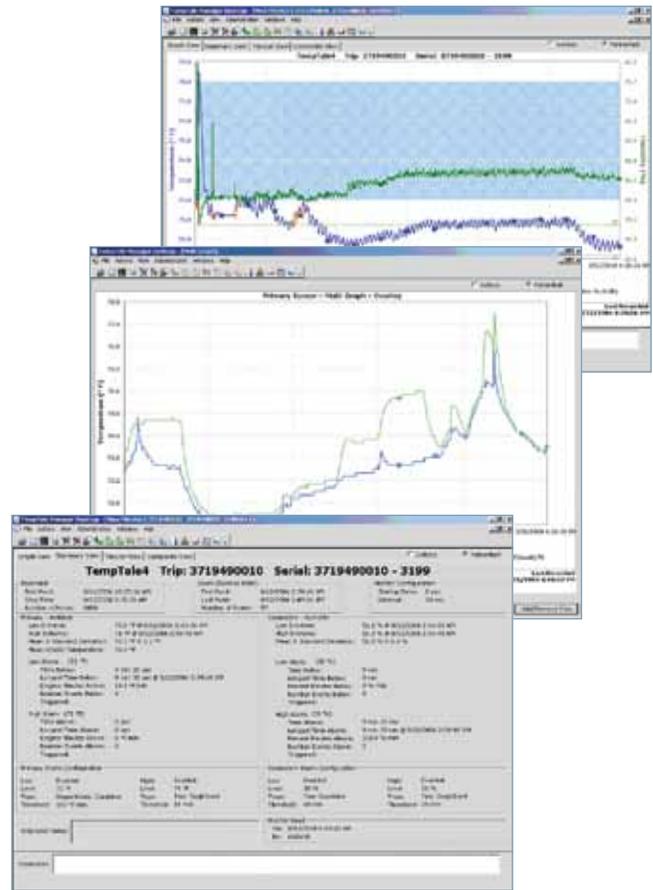
TempTale Manager<sup>®</sup> Desktop is an easy-to-use, feature-rich PC-based Windows<sup>®</sup> application for downloading, displaying, analyzing, reporting and archiving time and temperature data recorded by the TempTale4 BIO.

- Supported operating systems include: Windows 2000 and XP
- Automatically export data to Excel<sup>®</sup> for further in-depth analysis or processing
- View multiple graphs simultaneously by overlaying graphs from multiple monitors to quickly highlight relationships
- Software automatically computes key statistical information from multiple data files such as, Min, Max, Delta, Mean, and Standard Deviation Temperature Values

## Data Security and Integrity

Data Security and Integrity is administered in several ways:

- Data files are saved as encrypted XML files and can only be read by the TTMD application
- Username and password is required to launch application
- System employs an automatic file-naming convention to link a printed and signed record to an electronic record



## Quality and Validation Support and Services

Sensitech is committed to product excellence and customer satisfaction. Our facilities are ISO 9001:2008 certified, our products are tested to NIST traceable standards and we have successfully participated in and completed over 50 supplier audits since 2001 with leading pharmaceutical and biotechnology companies.

What does this commitment to quality and process improvement mean to you and your business? Peace of mind and the assurance that you are partnering with an industry leader that meets the highest level of quality standards in the industry.

To meet a wide range of validation requirements, we offer the following validation packages and certification services:

- TempTale4 BIO Monitor Validation Package
- TempTale Manager Desktop Software Validation Package
- 3 Point NIST traceable Certificate of Validation
- Post Validation Services with Certificate
- 1-Year Limited Warranty
- On-site Audits

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, Hong Kong, Melbourne, Mumbai, Redmond, and Santiago, 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](http://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 2000, Windows XP, and Microsoft Excel are registered trademarks of Microsoft Corporation in the United States and other countries.

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