

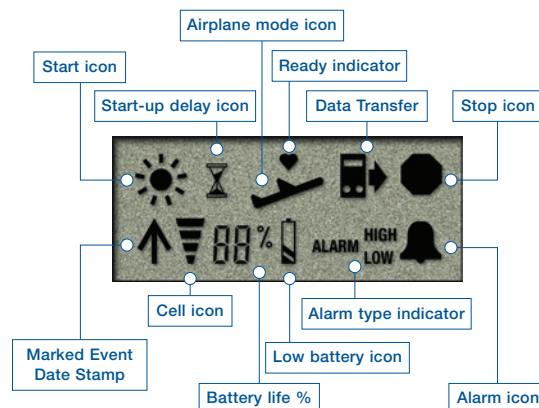
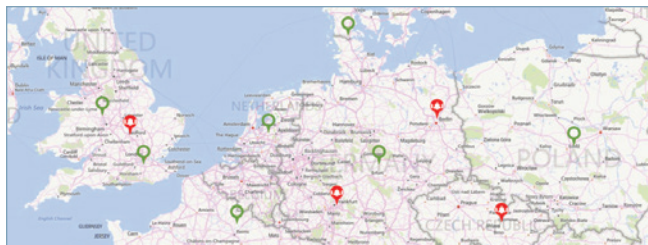


Real-Time Visibility for Temperature & Location

Visibility is a key component for logistics efficiency and quality assurance. The ability to monitor condition, geolocation, and light in real time delivers visibility and is a competitive advantage in today's complex supply chains. Regardless of where you sit—manufacturer, distributor or transportation provider—visibility is now a “must have.” Sensitech's TempTale® GEO monitor—the industry's only validated real-time temperature datalogger—improves logistics and supply chain performance by increasing visibility through chain-of-custody insight, as well as risk mitigation to correct temperature excursions during the transport of life sciences shipments.

TempTale® GEO Features and Benefits

- Provides real-time visibility for temperature and location to support both logistics and quality.
- Reduces risk by enabling active intervention to address correctable temperature excursions, based on customer-defined tolerance levels, before product quality is impacted.
- Gives advance indication to all supply chain partners of product location and arrival time, improving agility and responsiveness.
- Allows data to be viewed in real time through self-serve user interface—SensiWatch™ Tracks.
- Manages data in the same private cloud-hosted environment as other TempTale® units, which facilitates a view of the life sciences supply chain to drive continuous improvements and meet regulatory compliance standards.
- Provides PDF reports and allows alternate data download into a system-of-record database—ColdStream®—via USB.
- Ensures that no data gaps occur when the device travels through areas with no cellular coverage.



Intuitive LCD and LED indicators provide device status and alarm notification

TempTale® Geo Specifications									
Sensor Types	Temperature, Light								
Temperature Range for Storage	-20°C to 55°C								
Temperature Measurement Range	-15°C to 55°C								
Environmental Rating	IP64								
Temperature Accuracy Range	3 point NIST® traceable <table> <tr> <th>Range</th><th>Accuracy</th></tr> <tr> <td>-15°C to -10°C</td><td>±1°C</td></tr> <tr> <td>-10°C to 45°C</td><td>±0.5°C</td></tr> <tr> <td>45°C to 55°C</td><td>±1°C</td></tr> </table>	Range	Accuracy	-15°C to -10°C	±1°C	-10°C to 45°C	±0.5°C	45°C to 55°C	±1°C
Range	Accuracy								
-15°C to -10°C	±1°C								
-10°C to 45°C	±0.5°C								
45°C to 55°C	±1°C								
Temperature Resolution	0.1°C/F over full temperature measurement range								
Light Sensor	1-400 lux								
Temperature Measurement Responsiveness	Meets the requirements of USP 1118 and EN12830								
Cellular Communications	Global Quad-band GSM (850, 900, 1800, 1900 MHz), GPRS data								
Location Method	Cellular-based location								
Data Logger Memory Type	8k data points, Non-volatile EEPROM								
Programmable Data Logger Alarms	Maximum of 6 alarms using any combination of 4 alarm types								
Data logger Alarm Types	High/low temperature limit; Single Temperature range; Dual Temperature range; Time-only								
Cold Chain PDF report	Internally generated and stored PDF report; can be downloaded/printed using USB port								
Battery Life/Type	High Capacity Internal Lithium Battery • Shelf Life: 67 days; Operating: Minimum 7 days (15 minute reporting interval) • Shelf Life: 67 days; Operating: Minimum 14 days (30 minute reporting interval) • Longer intervals allow greater operating life up to 60 days								
Temperature Sensor Sampling Interval	15 minutes to 2 hours, factory configurable								
Data Reporting Interval	15 minutes to 8 hours, factory configurable								
Operating Modes	Standard Run mode; Delayed Start Run mode; Airplane mode; Ocean Container mode								
Housing	UL 94-V0 flame retardant plastic, IP64								
Mechanical, Shock & Vibration	3000 lb (1360 kg) crush resistant								
Dimensions	3.25 in. x 6.25 in. x 1 in. (82 mm x 165 mm x 25 mm)								
Weight	0.75 lb (0.34 kg)								
Certifications	FCC, CE, RoHS, PTCRB, WEEE, DO160G, EN61000-4-2 Level 4, IEC62133, UN-38.3, EN61000-6-3, EN61000-6-1, EN60950-1; Incidental food contact per U.S. FDA 21 CFR Part 181.32								
Validation	Designed and manufactured to comply with 21 CFR part 11, EU GDP, and EC Annex 11								
Device Interface	Status LEDs; LCD; Push buttons; Accepts USB Micro-B connector								
Real-Time Software Interface	SensiWatch™ Tracks Real-Time web-based application • Shipment creation • Trip Information including departure and arrival times, origin and destination locations, carrier, PO, product type • Temperature alarms • Email or TXT (SMS) temperature alarm and light notifications • Temperature statistics and history graph • Location information and history • Reports								
Compatible Software	TempTale Manager® Desktop (TTMD) 7.4 and higher; ColdStream® Cold Chain Manager 1.8 and higher								

SensiWatch™ Tracks—Designed for Supply Chain Efficiency

Visibility begins when the shipment begins; the depth of information collected up-front about the shipment enables a real-time notification of temperature, location, and light-triggered events. This is an important fact for all partners involved — shippers, receivers, and logistics providers.

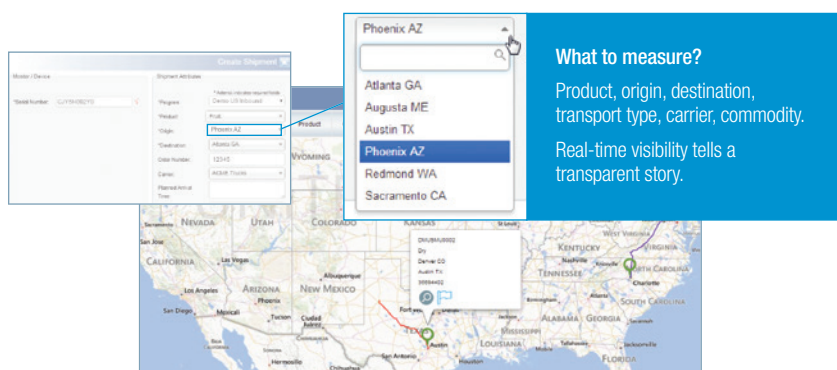
SensiWatch™ Tracks Features and Benefits

- View real-time data in multiple ways to best suit your business needs:
 - Map View showing the location of in-transit devices with mouse-over capabilities for additional detail.
 - Directory View highlighting shipment attributes with status in a tabular format.
 - Individual Trip Detail featuring shipment details, statistics, alarms and a temperature graph.
- Configurable condition status automatically triggers email or TXT (SMS) notifications for temperature, light or location events.
 - View many trips in aggregate or drill down to single trip detail.
 - Compare temperature statistics among groups.
 - Rank performance by top ten key performance indicators (KPI).
 - Monitor changes in KPIs over time to spot trends.
 - Compare multiple temperature graphs.
 - Determine appropriate alarm sensitivity to avoid “alert fatigue.”

Map View

Overview of all in-transit shipments and their current status for the past seven days, updated in real time as new data is collected.

- Zoom in/out for ideal viewing.
- Filter view by product, origin, destination, alarm status.
- Click on any shipment to view trip details.
- Flag trips for reference.



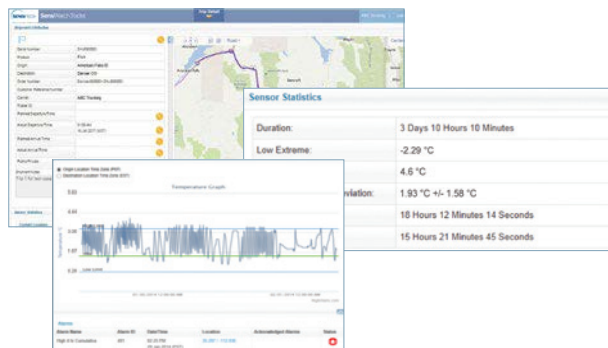
Directory View

View shipment details in an easy-to-read tabular format. Filters applied in either Map View or Directory View are automatically populated to the other for consistency.

Sprint Analytics Tools										
Key										Dropdown
Reports										Filter
493 out of 493 Reports										
Report	Model Status	Serial Number	Product	Origin	Destination	Order Number	Carrier	Arrival (Importance)	Planned (Status)	Actual (Status)
Completed	Not Locked	89270000	Phoenix-A2	Phoenix-A2	Barclays WA	00	ABC Trucking			
Completed	Not Locked	89270000	Lathrop	Phoenix-A2	Phoenix-Best FL	(Unconfirmed)	Arena Transport			
Completed	Not Locked	89270000	Phoenix-A2	Phoenix-A2	Archievo MG	00	ABC Trucking			
Completed	Not Locked	89270000	Elizabethton	Barclays WA	Barclays WA	00	TradeCo			
Partial	Not Locked	89270000	Paul	Phoenix-A2	Denver CO	00	ABC Trucking			
Partial	Not Locked	89270000	Archievo MG	Phoenix-A2	Phoenix-A2	00	ABC Trucking			
Partial	Not Locked	89270000	Rockledge	Archievo MG	Archievo MG	00	ABC Trucking			
Partial	Not Locked	89270000	Phoenix-A2	Phoenix-A2	Phoenix-A2	00	Arena Transport			
Completed	Not Locked	89270000	Phoenix-A2	Phoenix-A2	Phoenix-A2	00	TradeCo			
Completed	Not Locked	89270000	Phoenix-A2	Phoenix-A2	Phoenix-A2	00	TradeCo			
Partial	Not Locked	89270000	Phoenix-A2	Phoenix-A2	Phoenix-A2	00	Arena Transport			

Trip Detail Screen

Provides complete detail on shipment attributes, sensor statistics, temperature information graph, and alarm notifications.



Email Notifications

Subject line identifies shipment number and status (departed, late, sensor excursion, arrived) for quick information updates.

Email notification includes complete trip detail including shipment attributes and status information.

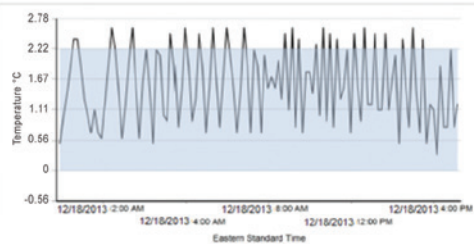
Trip Report

Shipment Number	35694402
Serial Number	DMUSMU0002
Product	Dry
Origin	Denver CO
Destination	Austin TX
Carrier	ACME Lines
Departure (Mountain Time)	12/18/2013 3:55:11 AM
Planned Arrival (Central Time)	12/18/2013 6:00:00 PM
Actual Arrival (Central Time)	12/18/2013 6:46:43 PM
Est. Trip Time (hrs)	13.1
Act. Trip Time (hrs)	13.9
Notes	Simulated trip



Mean °C	Std Deviation	Min °C	Max °C	Hours <0.9°C	Hours >2.2°C	Length (hours)
1.56	1.2	0.28	2.61	0.0	4.0	19.2

Alarm Name	Triggered Eastern Time	Status	Ack By	Ack On Eastern Time	Acknowledgement Notes
High 4 hr Cumulative	12/18/2013 3:27:16 PM	NEW			



Sensitech Inc. is focused on delivering supply chain visibility solutions that track, monitor and protect products for global leaders in the food, life sciences, consumer goods, and industrial markets. Our solutions are focused in three key areas: quality and compliance, supply chain security, and logistics performance management. Quality and compliance solutions address temperature-sensitive, complex supply chains focused on delivering the highest quality possible, while our supply chain security solutions help to mitigate risks associated with theft, diversion and chain of custody. Sensitech's logistics performance solutions deliver origin-to-destination, real-time transparency to any in-transit journey. Sensitech Inc. is an ISO 9001:2015 company, headquartered in Beverly, Mass., with over 35 sales, service and distribution locations around the world. Sensitech is a Carrier company, a leading provider of heating, air conditioning and refrigeration systems, building controls and automation, and fire and security systems leading to safer, smarter, sustainable and high-performance buildings. Unless otherwise indicated, all trademarks and service marks are the property of Sensitech Inc. Visit www.sensitech.com for additional information. ©2020 Carrier. All Rights Reserved. NIST is a registered trademark of The National Institute of Standards and Technology Agency of the United States Government.

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