

# TEMPERATURE MONITORING SYSTEM



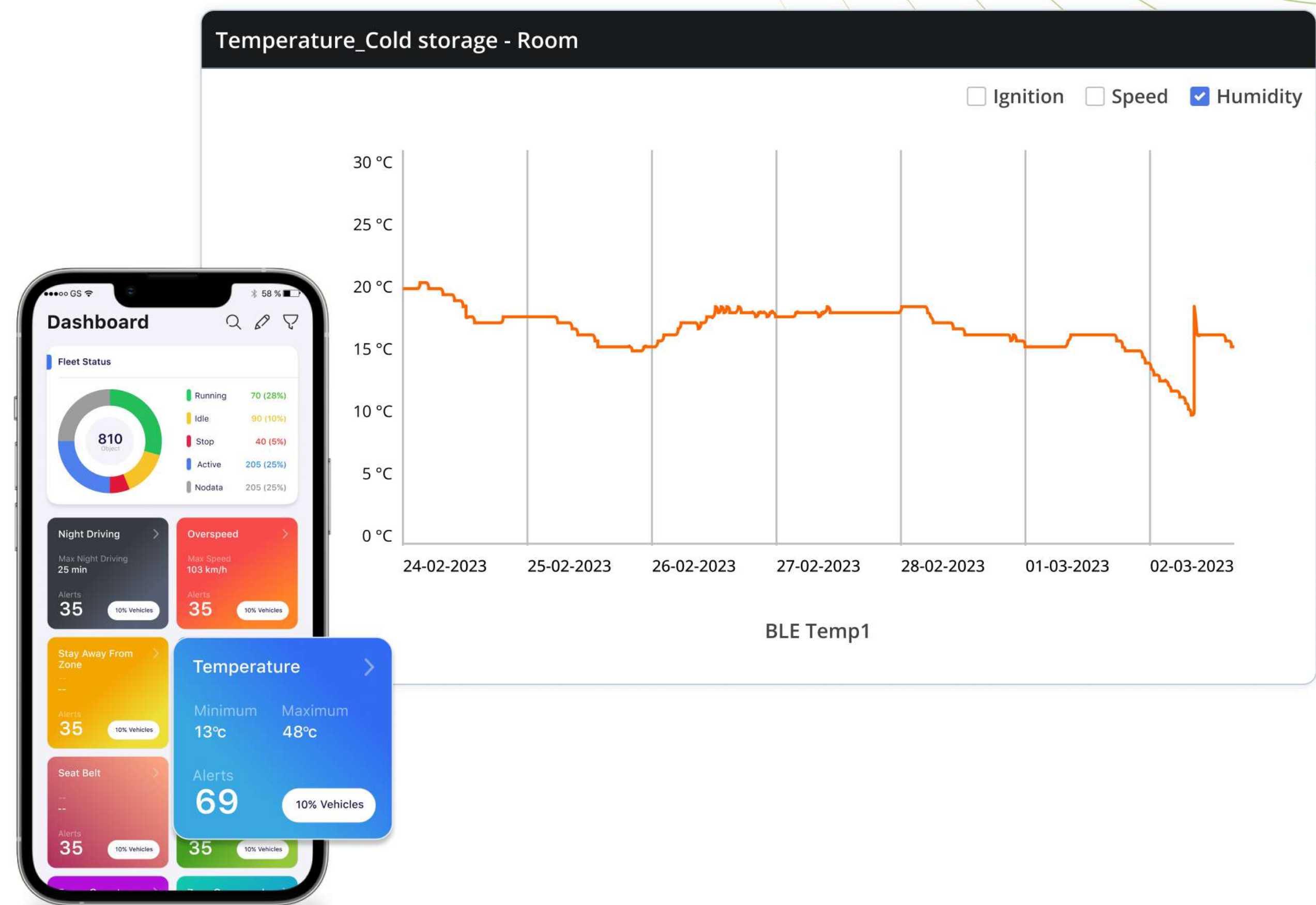


# Introduction

A versatile solution used across industries to monitor temperature conditions in real-time. It utilizes sensors that continuously tracks temperature, humidity.

The software sends alerts if any deviation occurs outside the set limits. By using temperature monitoring software, businesses can guarantee the safety and quality of their products. It helps to stay compliant with regulations, and prevent product spoilage.

Moreover, the software provides valuable data that can be used to streamline operations, spot trends and patterns, and drive business growth.





# Real-time Monitoring in Transit

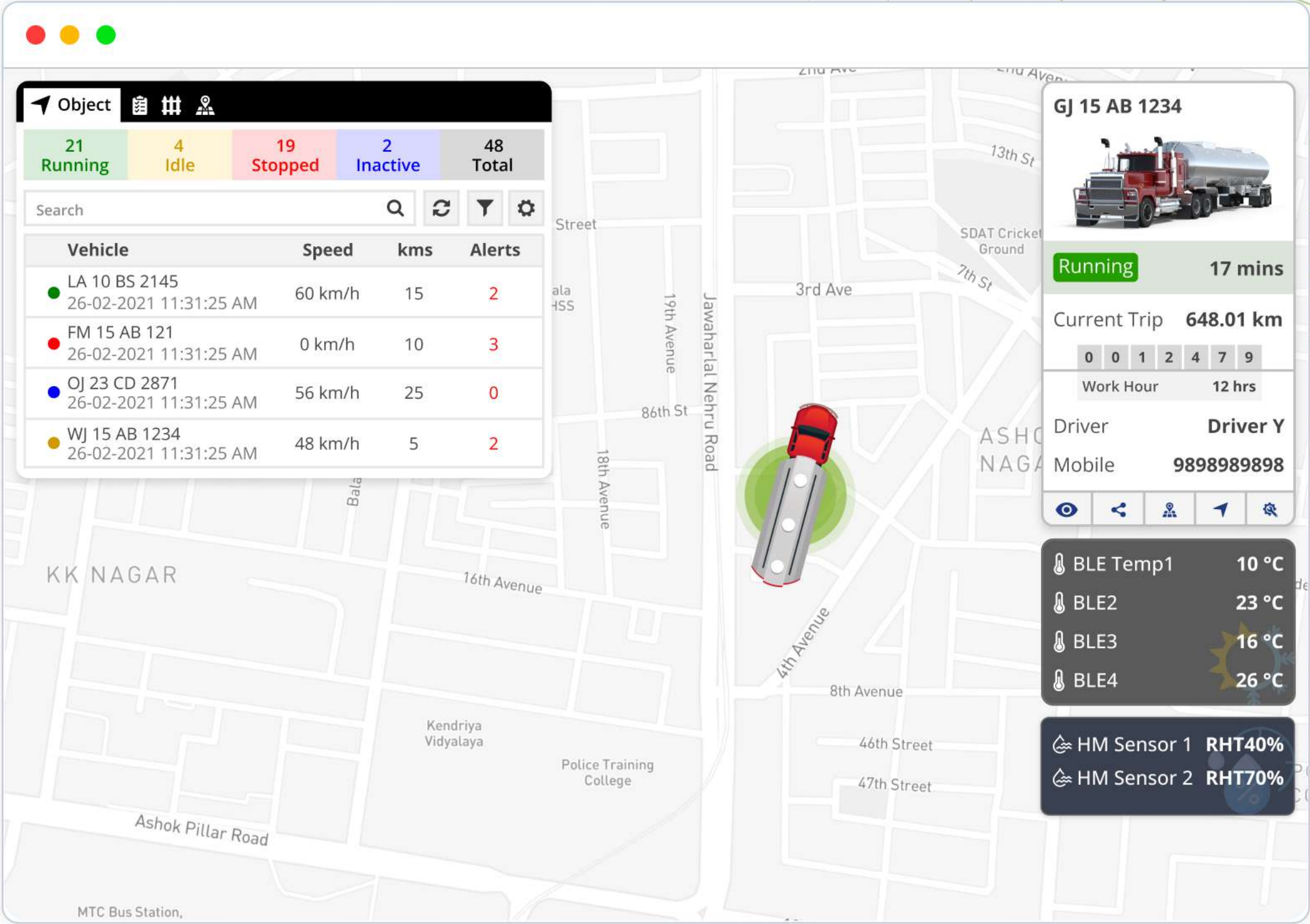
By combining temperature and humidity monitoring, businesses can ensure that their temperature-sensitive products are transported under optimal conditions.

- **Temperature Monitoring**

Real-time monitoring enables fleet managers to quickly respond to temperature deviations. The system generates alerts when the temperature exceeds or falls below a specified range. It allows for greater visibility and control over temperature conditions. It helps businesses to maintain compliance with regulatory requirements and quality standards.

- **Humidity Monitoring**

Humidity is an important factor in many industries, such as food and beverage, pharmaceuticals, etc. Real-time humidity monitoring allows businesses to quickly detect and respond to changes in humidity levels, reducing the risk of product damage or spoilage.





# Reports

Reports provide businesses with a detailed record of temperature conditions over time. These records can be used to identify trends and potential issues before they become critical.

- **Temperature Status**  
Get an overview of the temperature conditions in a specific location during a particular time period.
- **Temperature Summary**  
Get information such as the temperature range, average temperature, maximum and minimum temperature and humidity, and any deviations that have occurred.
- **Daily Temperature Summary**  
These reports are useful for businesses that need to monitor temperature conditions on a daily basis, such as in the transportation of perishable goods.
- **Temperature Summary per Trip**  
Provides an overview of the temperature conditions during a specific trip or transportation of goods.
- **And many more...**

Temperature Status									
Object	Location	Port	Temperature Value	Last Updated Time					
GJ 15 AA 9022	Giraffe Hill Drive	Temp 1	40	04-05-2021 01:24					
MH 02 RR 5689	Kénitra, Morocco (NW)	BLE Temp 1	35	09-05-2021 03:46					
KA 10 PO 3482									
GJ 28 HH 1122									
Temperature Summary									
Object	Location	Port	Avg. Temperature	Min. Temperature	Max. Temperature				
GJ 15 AA 9022	Giraffe Hill Drive	Temp 1	22	21	24				
MH 02 RR 5689	Kénitra, Morocco (NW)	BLE Temp 1	12	9	15				
KA 10 PO 3482									
GJ 28 HH 1122									
Temperature Daily Summary									
Object	Port		Date	Temperature			Humidity (%RH)		
	Temperature	Humidity		Average	Min	Max	Average	Min	Max
GJ 15 AA 9022	Temperature	--	04-05-2021	22	21	24	0.0	0.0	0.0
MH 02 RR 5689	Temperature	--	09-05-2021	12	9	15	0.0	0.0	0.0
KA 10 PO 3482									
GJ 28 HH 1122									
Temperature Trip Summary									
Object	Driver	IMEI No	Distance	Temperature			Alert(s)	No of Trip	
				Average	Min	Max			
GJ 15 AA 9022	Rose Bush	354017113916239	1902.49	22	21	24	2	1	
MH 02 RR 5689	Perry Scope	357073296626373	865.86	12	9	15	5	2	
KA 10 PO 3482	Penny Black	357073293783557	797.34	15	13	18	1	1	
GJ 28 HH 1122	Polly Pipe	357073290177019	760.26	18	15	21	1	1	
DL 12 DD 5553	Carmen Sayid	357073290018460	738.25	20	15	25	7	3	
GA 01 LL 2020	Wiley Waites	868003033659983	724.21	10	7	12	10	4	
KL 15 CN 2002	Bess Twishes	454777579413083	712.89	22	22	22	3	1	
DL 06 MN 8021	Mark Ateer	862007138003031	642.76	13	4	17	4	2	
GJ 15 AB 1234	Aida Bugg	451241984608426	639.98	18	16	22	6	2	
GJ 15 CN 6800	Teri Dactyl	865506308442524	636.37	19	16	25	8	3	



# Alerts

Stay informed with instant alert notifications about any fluctuations in temperature and take action before product spoilage occurs. Alerts can be set up to trigger notifications via SMS, email, or web application.

- **Temperature fluctuation alerts**

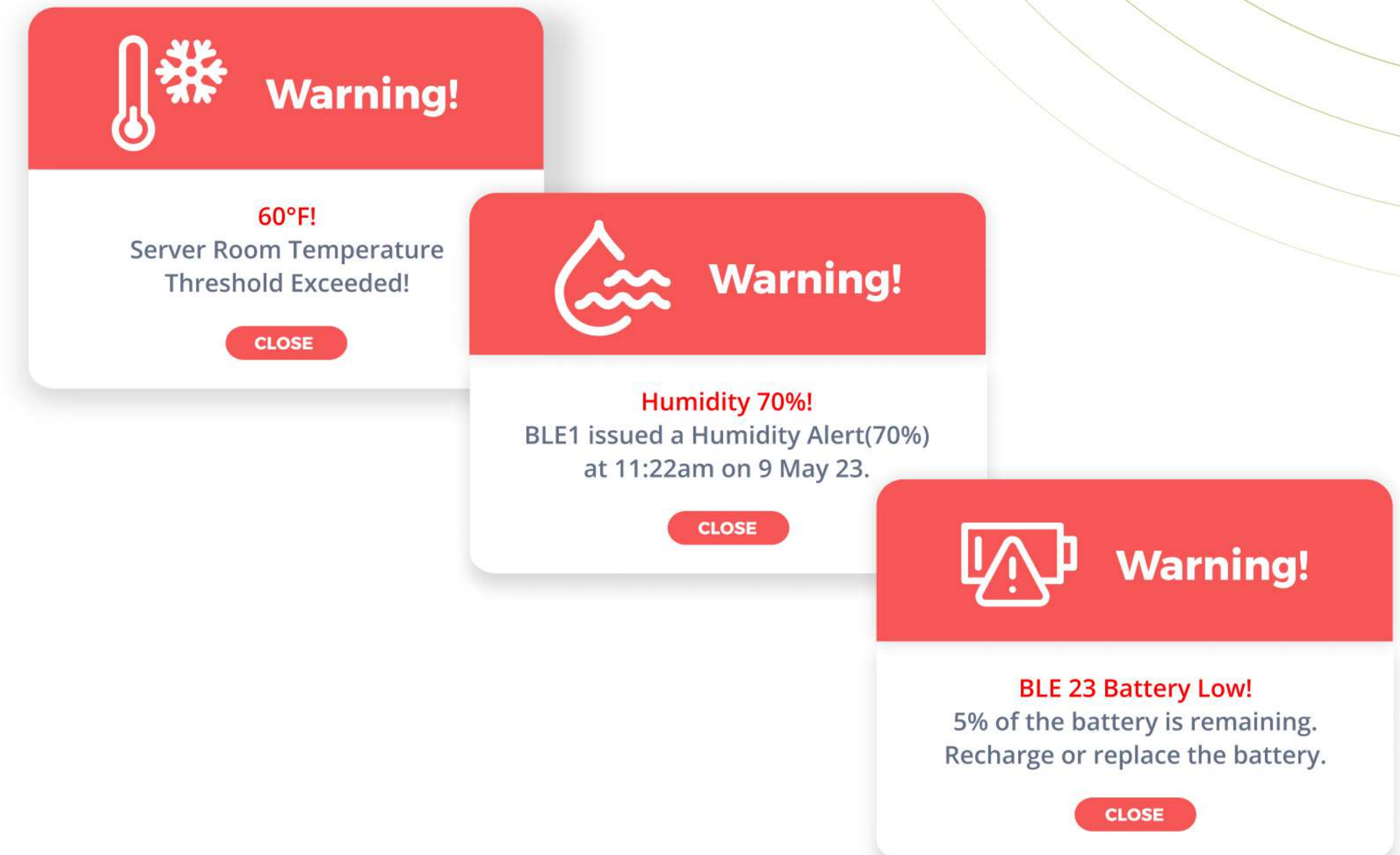
These alerts are triggered when the temperature of the monitored environment exceeds or falls below the specified temperature range.

- **Humidity fluctuation alerts**

These alerts are triggered when there are sudden and significant fluctuations in humidity levels beyond the desired range.

- **Battery life alerts**

These alerts are triggered when the battery level of the monitoring system is low. It indicates that the system may soon be unable to transmit data.





# Overcoming Challenges in Temperature Monitoring for Pharma Logistics

## Challenges

- Limited visibility into temperature conditions inside transport vehicles during transportation.
- Compliance with strict regulatory guidelines for maintaining temperature range.
- Human error in handling, storage, or transportation leading to temperature excursions and compromised product quality and safety.

## Solution

- Realtime temperature monitoring and data recording features for regulatory compliance.
- Automated alerting system to notify logistics team of temperature deviations.
- Data analysis for optimizing transport processes and reducing human error.

## Results

- Improved product quality and safety through timely identification and correction of temperature fluctuations.
- Compliance with regulatory requirements and reduced risk of penalties.
- Enhanced reputation and market position in the pharmaceutical industry.

UT250 Reefer Activity		
Sensor	Temperature	Humidity
BLE 1	15 °C	45%RHT
BLE 2	28 °C	58%RHT
BLE 3	14 °C	41%RHT
BLE 4	12 °C	52%RHT



High Temperature : 28°C

Sensor : BLE 2

Vehicle : UT250 Reefer

Time : 10-05-2023 01:24



# Ensures Freshness and Compliance in Dairy Product Transportation

## Challenges

- Dairy products are sensitive to temperature fluctuations from weather, handling, and transportation.
- Quality and freshness are critical, and deviations can harm taste, texture, and shelf-life.
- Complying with strict FDA, USDA, and other guidelines is necessary.

## Solution

- Installed temperature sensors in refrigerated trucks for continuous monitoring and real-time transmission to software.
- Software analyzes data and alerts fleet managers of deviations.
- Data helps optimize delivery processes and improve efficiency.

## Results

- Real-time monitoring and automated alerts reduce the risk of spoilage.
- Compliance with regulatory guidelines through temperature data recording and reporting.
- Improved product quality and safety increase customer satisfaction and loyalty.



**High Temperature : 6.7 °C**

Required Temperature : 2 °C to 4 °C

Time of Initial Temperature Drop : 11.23am

Location : 14, Stevens Street





# Ensure Quality and Safety of Bakery Products during Transportation

## Challenges

- Maintaining quality and safety of bakery products during transportation due to temperature fluctuations
- Meeting regulatory requirements for temperature control in bakery product distribution
- Risk of human error and mishandling during transportation
- Limited visibility into temperature conditions during distribution

## Solution

- Real-time temperature monitoring with sensors and software
- Real-time alerts if there is any deviation from the desired temperature range.
- Centralized dashboard and real-time analytics for issue identification
- Alerts for other factors such as door opening/closing, power outages, and refrigeration system failures.

## Results

- Increased temperature control visibility during transportation
- Faster response times to temperature excursions to maintain product quality and safety
- Improved compliance with food safety regulations



**Humidity Alert : 75%**  
Sensor : BT 1  
Vehicle : BT310 Reefer  
Time : 09-05-2023 02:29



Our software is designed to be **flexible, scalable, and customizable**.  
We understand that every business is unique, and we work closely with our customers to ensure that our solutions are tailored to meet their specific needs.

Contact us today to learn more about how our software can benefit your business.

[info@uffizio.com](mailto:info@uffizio.com)

**Thank you!**