# Copeland cargo monitoring solutions





## **Copeland Cargo Solutions**

We help retailers, suppliers, growers, shippers, exporters and restaurants ensure only the freshest and safest foods reach consumers. Our core technologies - coupled with our cold chain expertise - provide complete temperature monitoring solutions for our customers. We place data at your fingertips to make food quality and safety decisions easier and faster. Product offerings include real-time, wireless systems, as well as single-use data loggers.

## GO PDF Mini Logger

Temperature monitoring logger

The GO PDF Mini loggers monitor time and temperature of perishable products during distribution and storage. These easy-touse loggers eliminate the need for reading devices and proprietary software and are optimal for applications requiring fully independent operation - simply activate and place with your shipment.



2

#### Technical specifications

No (historical data logger only) **Alarm Indicators:** 

Battery: UN38.3 compliant Certifications: FCC, CE, RoHS, EN12830

CSV File:

IP Rating:

Export To Other Applications: Generates PDF, CSV

In-Use Life: 15, 60, 90 days (3, 12 and 20 min recording intervals, respectively)

Yes

**Marking Capabilities:** No

-30°C to 70°C (-22°F to 158°F) **Operating Environment: Operating System:** Windows 32 bit, 64 bit Recording interval: Every 3, 12 and 20 minutes

Resolution: 0.1 °C Shelf Life: 12 months

Size: 22 mm x 75 mm (0.87 in x 2.95 in)

without pouch

30 minutes Start Delay: Stop Button: No

Temperature Accuracy: ±0.5°C typical between -20°C to 40°C

(-4°F to 104°F) ±1.0°C (other ranges)

Time Zone: Reconciled to UTC 12.00 g (0.42 oz) Weight:



XpressPDF Logger digitally monitors time and temperature of lifescience products during distribution and storage. Loggers are flat and feature an integrated USB connection point which can be plugged directly into the USB port of a computer. Once connected, the logger automatically generates a PDF file containing complete time and temperature history, including graphs and summary data. XpressPDF Logger eliminates the need for reading devices and proprietary software and are optimal for applications requiring fully independent operation.

#### Technical specifications

Certification: RCM, China RoHS, EN12830

**Embedded CSV File:** 

Generates PDF with embedded CSV on PC **Export To Other Applications:** 

In-Use Life: 90 days and 110 days 25,920 data points Memory:

Nist Traceable:

**Operating Environment:** -30°C to 70°C (-22°F to 158°F)

IP Rating: IP67 Marking Capabilities:

Operating System: Windows 32-bit, 64-bit

Recording Interval: Every 5 minutes, 10 minutes or 15 minutes

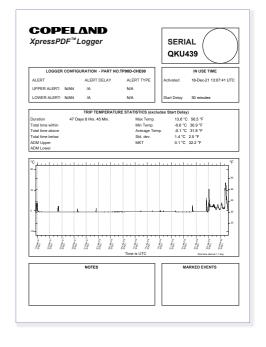
Shelf Life: 12 months

2.28 in x 1.42 in x .21 in (58 mm x 36 mm x 5.4 mm) Size:

Start Delay: 30 minutes Typical +/- 0.5°C **Temperature Accuracy:** 

Time Zone: UTC

Weight: 12 g (0.4 oz)





## GO NFC Logger

Time & temperature data through a mobile device

GO NFC Loggers monitor time and temperature of lifescience products during distribution and storage. Loggers are flat and transfer data via short-range, near field communications (NFC) using phones and tablets. Logger data is immediately available via mobile application or using the GO NFC Pad Reader. In addition, GO NFC Loggers leverage the capabilities of Android and iOS phones and eliminate the need for proprietary readers. Data is easily sent to any email address via the mobile application.

Cloud-based access customers who are interested in maintaining 24/7 historical records can subscribe to cloud upload capabilities where data can be accessed whenever needed.

#### Technical specifications

Alarm Configurations: Upper/lower/both/none

Alarm Indicators: LEDs indicate temp over/under/OK

Certifications: FCC, CE, RCM, China RoHS, WEEE

Memory: 1922 hard data points

Nist Traceable: Yes

Operating Environment: -25°C to 60°C (-13°F to 140°F)

 Read Range:
 Up to 5.08 cm (2 in)

 Reading Redundancy:
 GO NFC Pad Reader

 Recycle Options:
 GO GreenSense\* Program

In-Use Life: 6 days, 15 days, 30 days, 60 days, or 90 days

IP Rating: IP67

Shelf Life: 15 months

Size: 61 mm x 81 mm (2.4 in x 3.4 in)
Start Delay: Standard 30 minutes, customizable

**Supported Readers:** Android 4.1/iPhone 7 or newer with the NFC

app, NFC-enabled tablets, NFC Pad Reader with

software Mac and Windows compatible

Temperature Accuracy: -25°C to 60°C (-13°F to 140°F): ±0.5°C (32.9°F)

**Temperature Resolution:** 0.1°C (32.2 °F)

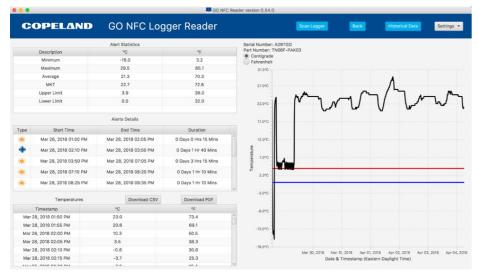
**Temperature Sampling Frequency:** One minute, 5 minute average record

**Weight:** 14.2 g (0.5 oz)











Scan the QR code and download the GO NFC Reader on your phone

## GO USB Logger

Reusable temperature logger with humidity and probe

The GO USB family of loggers offer a versatile solution to monitoring areas within your cold chain. With a LCD display and user configuration options, loggers are suitable for closed-loop scenarios as well as import/export applications. Depending on product model, the loggers measure ambient temperature and humidity, ambient temperature only, or ambient temperature and probe temperature. A range of useful information such as mean kinetic temperature, minimum and maximum temperatures and humidity, average temperature, alerts, and much more is presented in a secure PDF report which is generated automatically when connected to a PC.

The configuration software allows users to customize the loggers to meet their cold chain measurement needs.

Data gathered and stored can be easily shared among key stakeholders. An audit trail is also generated within the PDF report with time stamps showing marked events and handling of the logger.





#### Technical specifications

	GO USB Temp (T1XD)	GO USB Humidity (TH1XD)	GO USB Probe (TP1XD)	
Alerts:	Yes (user configurable)	Yes (user configurable)	Yes (user configurable)	
Battery Life:	12-24 months (configuration dependent)	12-24 months (configuration dependent)	12-24 months (configuration dependent)	
Certifications:	FCC, CE, RCM, EN12830	FCC, CE, RCM, EN12830	FCC, CE, RCM, EN12830	
Configuration Software:	Yes	Yes	Yes	
Humidity Accuracy:	N/A	At 25°C, between 0% and 95% RH: ±5%	N/A	
IP Rating (With Cap & Plug):	IP54	IP30	IP54	
LED:	Green = On, Red = Alert	Green = On, Red = Alert	Green = On, Red = Alert	
LCD Information:	Current temperature, Min/Max temperature, Avg temperature, MKT, Alert event, Battery level, Configured time (current or running total time)	Current temperature, Current humidity, Min/Max temperature, Min/ Max humidity, Avg temperature, Avg humidity, MKT, Alert event, Battery level, Configured time (current or running total time)	Current temperature (ambient and probe), Min/Max temperature (ambient and probe), MKT & Avg (ambient and probe), Alert event, Battery level, Configured time (current or running total time)	
Memory Data Points:	32,000 ambient temperature	16,000 ambient temperature / 16,000 humidity	16,000 ambient temperature / 16,000 probe	
Operating Environment:	-30°C to +70°C (-22°F to +158°F)	-30°C to +70°C (-22°F to +158°F)	-30°C to +70°C (-22°F to +158°F)	
Operating System:	Professional Versions of Vista, Windows 7, Windows 8, Windows 10, Adobe Reader SW (version 9 or later)	Professional Versions of Vista, Windows 7, Windows 8, Windows 10, Adobe Reader SW (version 9 or later)	Professional Versions of Vista, Windows 7, Windows 8, Windows 10, Adobe Reader SW (version 9 or later	
Probe:	N/A	N/A	1.5 m (4.9 ft) Weight 15 g (0.53 oz)	
Probe Measurement Range:	N/A	N/A	-80°C to +70°C (-112°F to +158°F)	
Replaceable Battery:	1/2 size AA (3.6V Lithium)	1/2 size AA (3.6V Lithium)	1/2 size AA (3.6V Lithium)	
Resolution:	0.1°C (0.18°F)	0.1°C (0.18°F)	0.1°C (0.18°F)	
Shelf-Life:	12 months	12 months	12 months	
Size:	108 mm x 48 mm x 19 mm (4.25 in x 1.89 in x 0.74 in)	108 mm x 48 mm x 19 mm (4.25 in x 1.89 in x 0.74 in)	108 mm x 48 mm x 19 mm (4.25 in x 1.89 in x 0.74 in)	
Sounds Alert (Buzzer):	Yes (user configurable)	Yes (user configurable)	Yes (user configurable)	
Temperature Accuracy (Ambient):	Typical: ±0.5°C (±0.9°F) between -20°C and +60°C (-4°F and 158°F) ±0.7°C (±1.4°F) other	Typical: $\pm 0.5^{\circ}$ C ( $\pm 0.9^{\circ}$ F) between -20°C and +60°C (-4°F and 158°F) $\pm 0.7^{\circ}$ C ( $\pm 1.4^{\circ}$ F) other	Typical: $\pm 0.5^{\circ}$ C ( $\pm 0.9^{\circ}$ F) between $-20^{\circ}$ C and $+60^{\circ}$ C ( $-4^{\circ}$ F and $158^{\circ}$ F) $\pm 0.7^{\circ}$ C ( $\pm 1.4^{\circ}$ F) other	
Temperature Accuracy (Probe):	N/A	N/A	Typical: $\pm 1.5^{\circ}$ C ( $\pm 2.7^{\circ}$ F) between -80°C to -30°C (-112°F to -22°F $\pm 2^{\circ}$ C ( $\pm 3.7^{\circ}$ F) other	
Weight:	52 g (1.83 oz)	52 g (1.83 oz)	52 g (1.83 oz)	

5



## AutoSense<sup>™</sup> Inbound

A complete automatic wireless temperature monitoring system

Inbound monitoring is self-contained, utilizes cellular networks, and does not require IT departments to oversee installation or ongoing maintenance. GO Wireless Loggers arrive at the location and are automatically uploaded by the readers. Temperature data is sent via a cellular modem to a cloud repository where text email alerts are created and delivered to predefined individuals

#### Technical Specifications

#### Go Wireless Logger

**Alarm Configurations:** Upper/lower/both/none (consecutive)

Silicon based sensor is calibrated at the time of manufacture by Texas Instruments; NIST certifi-Calibration:

cate of traceability available

Frequency: US 915 MHz or EU 868 MHz

Up to 30 days, more in-use life with hibernation In-Use Life:

Memory: 1922 hard data points Read Range: 91 meters (300 feet)

12 months. Frozen SKU: 8 months Shelf Life: 60 mm x 84 mm (2.4 in x 3.3 in) Size: Standard 30 minutes, customizable Start Delay:

+/- 0.5 typical between -20°C to 60°C (-4°F to 140°F) Temperature Resolution: 0.1°C Temperature Accuracy:

**Temperature Sampling Frequency:** One minute, five minute average record

Weight: 17 g (0.6 oz)

**Reader Specifications** 

US 915 MHz or EU 868 MHz Frequency:

Indicators: 3-color LEDs showing system status and signal strength

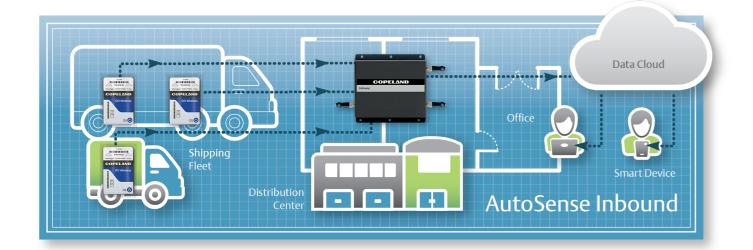
Can utilize existing 802.11 WiFi or hardwire Ethernet connection at customer request; Internet Connectivity:

US 2.4Ghz ISM WiFi frequency band; multiband security mixed WPA/WPA2-PSK; FCC, IC, CE,

RCM, WEB, WWAN 4G/3G/2G

110VAC Read Range: 91 meters (300 feet) Power:

Installation & Remote Maintenance: Performed by Copeland



## GO Real-Time 4G/5G Tracker

Temperature, location and security with dual-mode 4G/5G coverage

Keeping track of shipments has never been easier with the GO Real-Time 4G/5G Tracker. Using cellular technology, trackers provide temperature and location alerts as your shipment moves through the supply chain. And now, with our 4G/5G cellular technology, connectivity and access to your data is further enhanced. Rest assured that visibility to temperature, humidity, and location data will be available despite the ongoing transition in the cellular technology industry.





#### Technical specifications

UN38.3 Compliant Battery:

Cellular: CAT M1/NB1: B1/B2/B3/B4/B5/B8/B12/

B13/B18/B19/B20/B26/B28 EGPRS: 850/900/1800/1900MHz

FCC, IC, CE, PTCRB, RCM, IFETEL, Certifications:

RTCA/DO-160G Compliant

Optimal: Below 20°C and 60% RH Device Storage: **Humidity Accuracy:** At 25°C, between 20% RH and 80%

RH: ±10% RH

20% to 95% operation typical **Humidity Range:** 

Tri-mode with up to 20 days of In-Use Life:

operation, 6-minute measurements reported at 18-minute intervals

IP Rating:

Light Sensor Sensitivity: ±0.5 Lux, minimum detectable 1.0 Lux Oversight Dashboard: Copeland.com/Oversight

Shelf Life: Shipped with a minimum in-use and shelf life of approximately 6 months.

Please check the "Activate By Date" on the product box and follow a firstin-first-

out process.

Size: 76 mm x 51 mm x 19 mm (3.0 in x 2.0 in x 0.75 in)

**Temperature Range:** -20°C to 60°C (-4°F to 140°F)

operating environment LT (Low Temperature) model -30°C to 60C (-22°F to 140°F)

**Temperature Accuracy:** ±0.5°C (0.9°F) typical between

-20°C to 60°C (-4°F to 140°F)

Weight: 68 g (0.15 lbs)

## GO Real-Time 2G Tracker

Temperature, location and security with 2G coverage

Combining our real-time temperature and location reporting technology with a highly sensitive light sensor, the GO Real-Time Lux Tracker detects unauthorized access to your high value assets during transit. Whether your cargo is at the border, a DOT checkpoint, or the receiver's dock, you know in real-time when and where your shipment is being accessed as well as the temperature of your product throughout the trip. This easy to use system provides visibility at an affordable cost and fits in the palm of your hand. Simply pull the tab to activate the device, place in a container or trailer and input the serial number into Oversight to access the shipment data in real-time.



#### Technical specifications

Battery: UN38.3 Compliant

Cellular: 850/900/1800/1900 MHz Quadband

GSM/GPRS

Certifications: FCC, PTCRB, CE, Anatel, IFETEL, CNC, ICASA, EAC, , RTCA/DO-160G Compliant

Optimal: Below 20°C and 60% RH Device Storage: Up to 14 days operation at 0°C and In-Use Life:

up to 7 days operation at -20°C with 6-minute location and temperature

measurements reported at 18-minute

IP Rating:

Light Sensor Sensitivity: ±0.5 Lux, minimum detectable 1.0 Lux Oversight Dashboard:

Copeland.com/Oversight

Shelf Life: Shipped with a minimum in-use and

shelf life of approximately 6 months. Please check the "Activate By Date" on the product box and follow a first in-

first-out process.

76 mm x 51 mm x 19 mm Size: (3.0 in x 2.0 in x 0.75 in)

-20°C to 70°C (-4°F to 158°F) operating **Temperature Range:** 

environment

±0.5°C (0.9°F) typical between Temperature Accuracy: -20°C to 60°C (-4°F to 140°F)

68 g (0.15 lbs) Weight:



## GO Real-Time XL 4G5G LT Tracker

Temperature, location, humidity and security with dual-mode 4G/5G coverage



Extended battery life provides full coverage for your products on the road, in the port and out on the water. When your ship leaves port, the GO Real-Time XL 4G/5G-LT Tracker keeps track of the temperature and humidity. Every time the ship nears port, the unit automatically con-nects and uploads data before the ship reaches the docks. And now, the new -LT series tracker is specifically designed for low temperature shipments of frozen goods (down to -30C). With improved location accuracy and ever- expanding 4G/5G global networks, you can rest assured that visibility to your perishable shipments will be available when you need it most. The GO Real-Time XL 4G/5G-LT Tracker senses light when doors are opened and alerts you when your products are at risk on the road.

#### Technical specifications

**Battery: UN38.3 Compliant** 

CAT M1/NB1: B1/B2/B3/B4/B5/B8/B12/ Cellular:

B13/B18/B19/B20/B26/B28 EGPRS: 850/900/1800/1900MHz

Certifications: FCC, IC, CE, PTCRB, RCM, ANATEL, MIC,

MOC, INDOTEL, CONATEL, RTCA/DO-

160G Compliant

Optimal: Below 20°C and 60% RH **Device Storage:** Tri-mode with up to 60 days of In-Use Life:

op-eration, 10-minute measurements reported at 60-minute intervals

IP Rating:

**Light Sensor Sensitivity:** ±0.5 Lux, minimum detectable 1.0 Lux

Oversight Dashboard: Copeland.com/Oversight

Shelf Life: Shipped with a minimum in-use and

shelf life of approximately 6 months. Please check the "Activate By Date" on the product box and follow a first in-

first-out process.

76 mm x 51 mm x 19 mm (3.0 in x 2.0 in Size:

**Temperature Range:** -30°C to 60°C (-22°F to 140°F)

operating environment

±0.5°C (0.9°F) typical between **Temperature Accuracy:** -20°C to 60°C (-4°F to 140°F)

140 g (0.3 lbs)

Weight:



## GO Real-Time Reusable 4G/5G Tracker

Temperature, location and security dual-mode 4G/5G coverage



GO Real-Time Reusable 4G/5G-LT Tracker is a temperature monitoring solution that does not require fixed installation or hardware maintenance, with continuous coverage for your products over the road. The reusable solution is designed for customers who would like to reuse the same tracker on multiple shipments. With our 4G/5G cellular technology and ability to recharge, access to your data is further enhanced. The GO Real-Time Reusable 4G/5G-LT Tracker senses light when doors are opened and alerts you when your products are at risk on the road.

#### Technical specifications

UN38.3 Compliant Battery:

CAT M1/NB1: B1/B2/B3/B4/B5/B8/ B12/ Cellular: B13/B18/B19/B20/B26/B28 EGPRS:

850/900/1800/1900MHz

FCC, IC, CE, PTCRB, RCM, IFETEL. Certifications:

20% to 95% operation typical

RTCA/DO-160G Compliant

**Device Storage:** Optimal: Below 20°C and 60% RH

At 25°C, between 20% RH and 80%

Tri-mode with up to 60 days of In-Use Life:

operation, 10-minute measurements reported at 60-minute intervals

IP44 IP Rating:

**Humidity Accuracy:** 

**Humidity Range:** 

8

Light Sensor Sensitivity:

±0.5 Lux, minimum detectable 1.0 Lux

Oversight Dashboard: Shelf Life:

Copeland.com/Oversight

Shipped with a minimum in-use and shelf life of approximately 6 months. Please check the "Activate By Date" on the product box and follow a firstin-first-

out process.

Size:

78 mm x 52 mm x 33 mm (3.07 in x 2.06 in x 1.31 in)

Temperature Range: -20°C to 60°C (-4°F to 140°F) operating environment,

LT (Low Temperature) model -30°C to 60°C (-22°F to 140°F)

Temperature Accuracy:

±0.5°C (0.9°F) typical between -20°C to 60°C (-4°F to 140°F)

136 g (0.30 lbs) Weight:

## Comprehensive Solutions for Real-Time Temperature Tracking











	Standard			- LT Series	
	2G Go Lux	4G Standard	Reusable	XL	Reusable
Temperature	$\sqrt{}$	V	$\sqrt{}$	V	V
Humidity		V	$\sqrt{}$	V	√
Location	$\sqrt{}$	V	$\sqrt{}$	V	V
Light	$\sqrt{}$	V	$\sqrt{}$	V	V
14 Day	V				
20 Day		√			
60 Day				V	
90 Day					
Probe					
CO2 Sensor					

## Oversight Software and Services

## Oversight dashboard

Comprehensive and automated reporting is provided through the Oversight Dashboard. Visit Copeland.com/Oversight and enter the GO Real-Time Tracker serial number. Access real-time information about your shipment or login to your secure web portal and see all of your shipments at a glance.

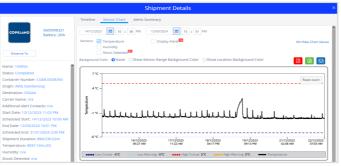


Total California Security and a security of the control of the con

Oversight Map View

Oversight Shipment View





**Oversight Shipment Route** 

Oversight Shipment Details

### Oversight mobile

Oversight mobile enables you to view critical shipment details including temperature and location in real-time, direct from your smartphone. GO Real-Time Tracker are placed on perishable shipments and communicate data via cellular connectivity. Simply open the Oversight Mobile app to view data or set up alerts to be sent directly to your smartphone. Available on Andriod and iOS devices.









Scan the QR code and download Oversight on your phone





## Track Your Shipment Provide customers and employees direct access to track

real-time critical shipments

Designed with growers and producers in mind, the Track Your Shipment module provides quick and easy access to real-time in-transit, perishable shipment data. Our website widget can be easily embedded on the homepage of your website for easy customer access. Or, the widget can be placed on your internal intranet enabling employees to do quick order and quality tracking.

The interface allows users to simply input a GO Real Time Tracker serial number to gain visibility to location and temperature data. Choose from five color options to customize the user experience to your website and brand standards.

#### Benefits

- No cost and convenient method to track perishable shipments and obtain visibility to shipment and temperature data
- Improve operational efficiency, enhance transparency and promote food quality and safety
- Match design to fit existing branding, customize the experience and elevate your brand



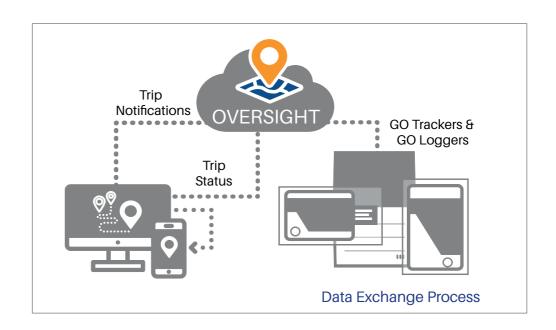
Consolidating data streams of shipment information and scores of temperature monitoring data can drastically improve the efficiency of your operation. We provide seamless in-transit cold chain data integration for those seeking to consolidate shipment data into existing

- · Eliminate disparate platforms, siloed data streams and countless logins
- · Reduce duplicate work by streamlining shipment creation and processes into one system
- Receive shipment updates, temperature and sensor alerts in a single view

All while enjoying the robust cold chain data provided by Oversight, our cloudbased temperature monitoring portal.

#### Benefits

- Automate create shipment process and receive logger or tracker data seamlessly
- · Seek to lessen overhead costs and utilize staff for other priority responsibilities
- Simplify your operation and consolidate in-transit cold chain data



12 13



#### **About Copeland**

Copeland is a global leader in sustainable heating, cooling, refrigeration and industrial solutions. We help commercial, industrial, refrigeration and residential customers reduce their carbon emissions and improve energy efficiency. We address issues like climate change, growing populations, electricity demands and complex global supply chains with innovations that advance the energy transition, accelerate the adoption of climate friendly low GWP (Global Warming Potential) and natural refrigerants, and safeguard the world's most critical goods through an efficient and sustainable cold chain. We have over 18,000 employees, with feet on the ground in 50 countries - a global presence that makes it possible to serve customers wherever they are in the world and meet challenges with scale and speed. Our industry-leading brands and diversified portfolio deliver innovation and technology proven in over 200 million installations worldwide. Together, we create sustainable solutions that improve lives and protect the planet today and for future generations. For more information, visit copeland.com.

#### Scan to visit:





Copeland Asia

Cargo Solutions

Technical Support is available 24 hours a day, 7 days a week.

Toll Free: +1-877-998-7299 | Direct: +1-877-832-07200 | Email: CargoAsia@Copeland.com

To learn more, visit copeland.com

Asia 04 00 Issued 11/2024 ©2024 Copeland LP. All rights reserved.

