Copeland cargo monitoring solutions

COPELAND

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-to use 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.

Technical specifications

|	
Alarm Indicators:	No (historical data logger only)
Battery:	UN38.3 compliant
Certifications:	FCC, CE, RoHS, EN12830
CSV File:	Yes
Export To Other Applications:	Generates PDF, CSV
In-Use Life:	15, 60, 90 days (3, 12 and 20 min recording intervals, respectively)
IP Rating:	IP67
Marking Capabilities:	No
Operating Environment:	-30°C to 70°C (-22°F to 158°F)
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
Start Delay:	30 minutes
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
Weight:	12.00 g (0.42 oz)

XpressPDF™ Logger
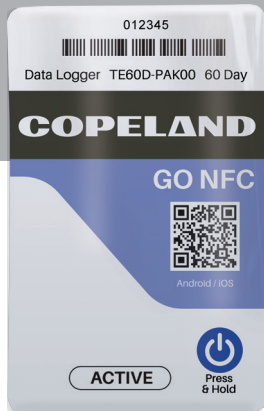## Temperature monitoring logger

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:	Yes
Export To Other Applications:	Generates PDF with embedded CSV on PC
In-Use Life:	90 days and 110 days
Memory:	25,920 data points
Nist Traceable:	Yes
Operating Environment:	-30°C to 70°C (-22°F to 158°F)
IP Rating:	IP67
Marking Capabilities:	Yes
Operating System:	Windows 32-bit, 64-bit
Recording Interval:	Every 5 minutes, 10 minutes or 15 minutes
Shelf Life:	12 months
Size:	2.28 in x 1.42 in x .21 in (58 mm x 36 mm x 5.4 mm)
Start Delay:	30 minutes
Temperature Accuracy:	Typical +/- 0.5°C
Time Zone:	UTC
Weight:	12 g (0.4 oz)
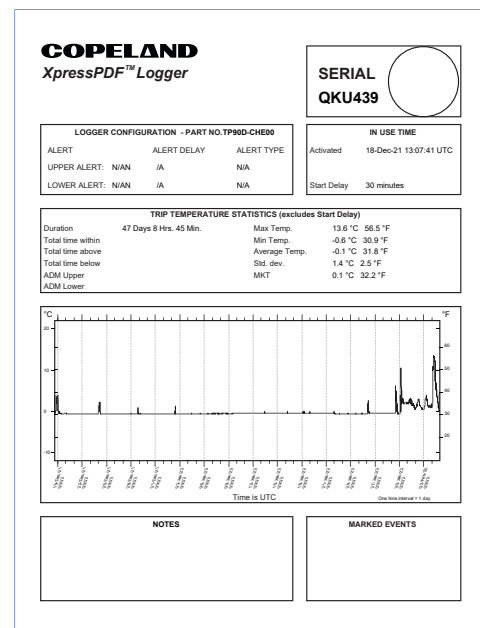
GO NFC Logger
Time & temperature data through a mobile device

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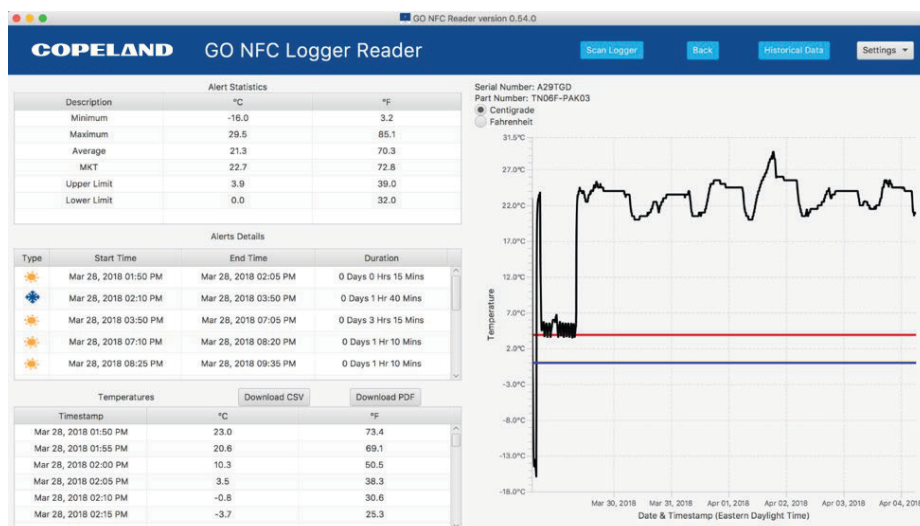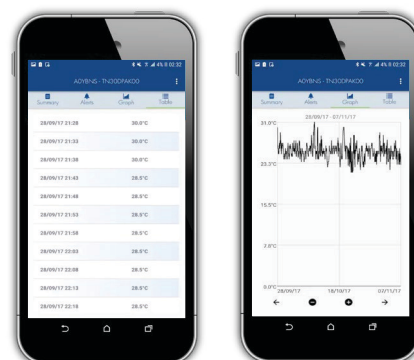
Scan the QR code and download the GO NFC Reader on your phone

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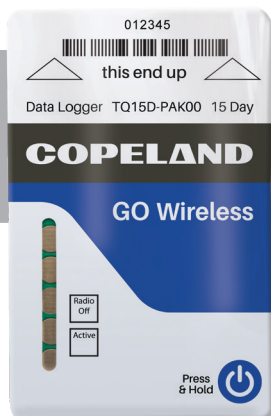
The configuration software allows users to customize the loggers to meet their cold chain measurement needs.

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: ±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: ±0.5°C (±0.9°F) between -20°C and +60°C (-4°F and 158°F) ±0.7°C (±1.4°F) other
Temperature Accuracy (Probe):	N/A	N/A	Typical: ±1.5°C (±2.7°F) between -80°C to -30°C (-112°F to -22°F ±2°C (±3.7°F) other
Weight:	52 g (1.83 oz)	52 g (1.83 oz)	52 g (1.83 oz)

AutoSense™ 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)
Calibration:	Silicon based sensor is calibrated at the time of manufacture by Texas Instruments; NIST certificate of traceability available
Frequency:	US 915 MHz or EU 868 MHz
In-Use Life:	Up to 30 days, more in-use life with hibernation
Memory:	1922 hard data points
Read Range:	91 meters (300 feet)
Shelf Life:	12 months, Frozen SKU: 8 months
Size:	60 mm x 84 mm (2.4 in x 3.3 in)
Start Delay:	Standard 30 minutes, customizable
Temperature Accuracy:	+/- 0.5 typical between -20°C to 60°C (-4°F to 140°F) Temperature Resolution: 0.1°C
Temperature Sampling Frequency:	One minute, five minute average record
Weight:	17 g (0.6 oz)
Reader Specifications	
Frequency:	US 915 MHz or EU 868 MHz
Indicators:	3-color LEDs showing system status and signal strength
Internet Connectivity:	Can utilize existing 802.11 WiFi or hardwire Ethernet connection at customer request; US 2.4Ghz ISM WiFi frequency band; multiband security mixed WPA/WPA2-PSK; FCC, IC, CE, RCM, WEB, WWAN 4G/3G/2G
Power:	110VAC Read Range: 91 meters (300 feet)
Installation & Remote Maintenance:	Performed by Copeland
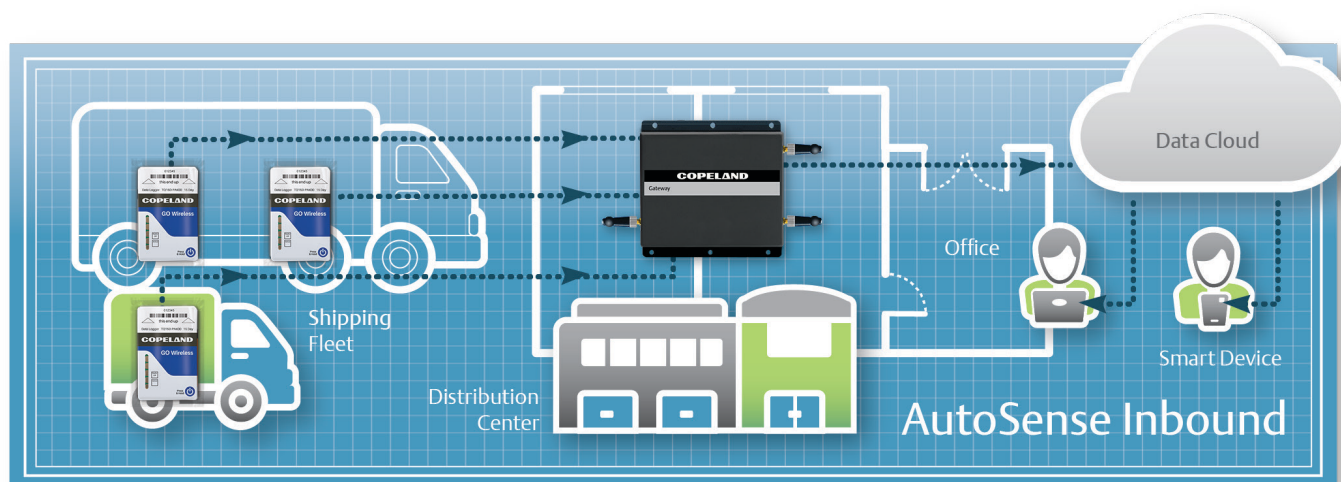
GO Real-Time 4G/5G Tracker

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

Battery:	UN38.3 Compliant
Cellular:	CAT M1/NB1: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B26/B28 EGPRS: 850/900/1800/1900MHz
Certifications:	FCC, IC, CE, PTCRB, RCM, IFETEL, RTCA/DO-160G Compliant
Device Storage:	Optimal: Below 20°C and 60% RH
Humidity Accuracy:	At 25°C, between 20% RH and 80% RH: ±10% RH
Humidity Range:	20% to 95% operation typical
In-Use Life:	Tri-mode with up to 20 days of operation, 6-minute measurements reported at 18-minute intervals
IP Rating:	IP44
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
Device Storage:	Optimal: Below 20°C and 60% RH
In-Use Life:	Up to 14 days operation at 0°C and up to 7 days operation at -20°C with 6-minute location and temperature measurements reported at 18-minute intervals
IP Rating:	IP54
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.
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 70°C (-4°F to 158°F) operating environment
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 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	**Oversight Dashboard:**	Copeland.com/Oversight
Cellular:	CAT M1/NB1: B1/B2/B3/B4/B5/B8/B12/ B13/B18/B19/B20/B26/B28 EGPRS: 850/900/1800/1900MHz	**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.
Certifications:	FCC, IC, CE, PTCRB, RCM, ANATEL, MIC, MOC, INDOTEL, CONATEL, RTCA/DO-160G Compliant	**Size:**	76 mm x 51 mm x 19 mm (3.0 in x 2.0 in x 0.75 in)
Device Storage:	Optimal: Below 20°C and 60% RH	**Temperature Range:**	-30°C to 60°C (-22°F to 140°F) operating environment
In-Use Life:	Tri-mode with up to 60 days of op¬eration, 10-minute measurements reported at 60-minute intervals	**Temperature Accuracy:**	±0.5°C (0.9°F) typical between -20°C to 60°C (-4°F to 140°F)
IP Rating:	IP44	**Weight:**	140 g (0.3 lbs)
Light Sensor Sensitivity:	±0.5 Lux, minimum detectable 1.0 Lux		

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

Battery:	UN38.3 Compliant	**Light Sensor Sensitivity:**	±0.5 Lux, minimum detectable 1.0 Lux
Cellular:	CAT M1/NB1: B1/B2/B3/B4/B5/B8/ B12/ B13/B18/B19/B20/B26/B28 EGPRS: 850/900/1800/1900MHz	**Oversight Dashboard:**	Copeland.com/Oversight
Certifications:	FCC, IC, CE, PTCRB, RCM, IFETEL, RTCA/DO-160G Compliant	**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.
Device Storage:	Optimal: Below 20°C and 60% RH	**Size:**	78 mm x 52 mm x 33 mm (3.07 in x 2.06 in x 1.31 in)
Humidity Accuracy:	At 25°C, between 20% RH and 80% RH: ±10% RH	**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)
Humidity Range:	20% to 95% operation typical	**Temperature Accuracy:**	±0.5°C (0.9°F) typical between -20°C to 60°C (-4°F to 140°F)
In-Use Life:	Tri-mode with up to 60 days of operation, 10-minute measurements reported at 60-minute intervals	**Weight:**	136 g (0.30 lbs)
IP Rating:	IP44		

Comprehensive Solutions for Real-Time Temperature Tracking

	Standard			- LT Series	
	2G Go Lux	4G Standard	Reusable	XL	Reusable
Temperature	√	√	√	√	√
Humidity		√	√	√	√
Location	√	√	√	√	√
Light	√	√	√	√	√
14 Day	√				
20 Day		√			
60 Day				√	
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.
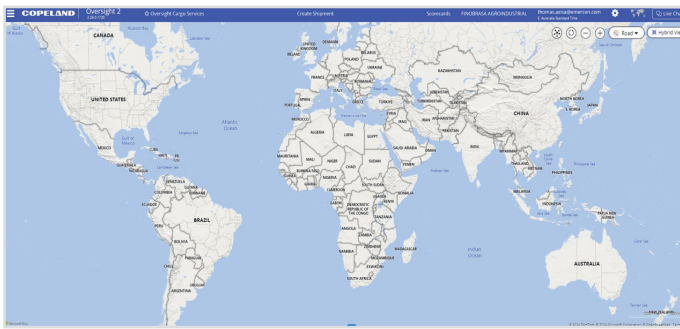
Oversight Map View
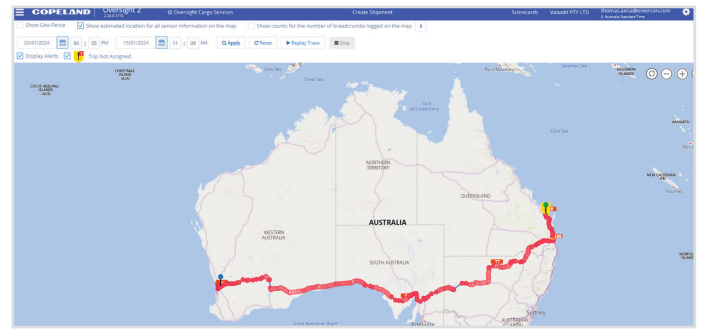
Oversight Shipment View
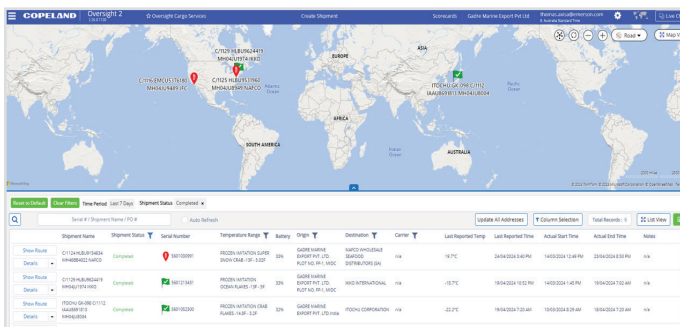
Oversight Shipment Route
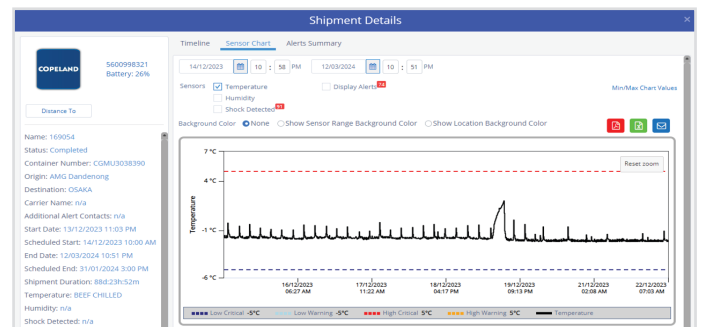
Oversight Shipment Details

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.
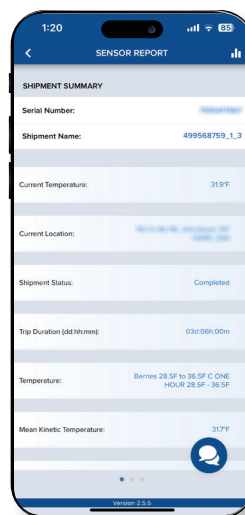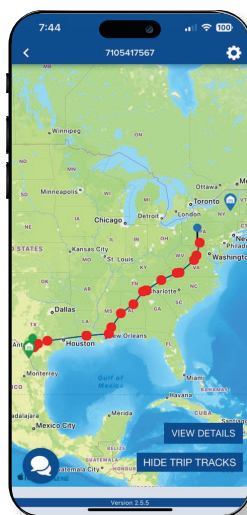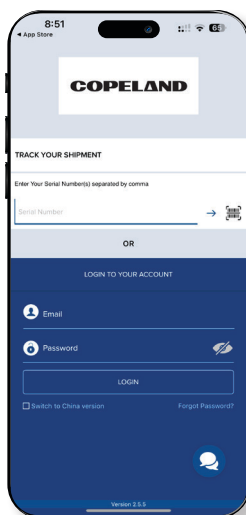
Scan the QR code and download Oversight on your phone

Oversight Cargo Services

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

Data Integration

Consolidate and automate data streams of shipment information into the platform of your choice

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 software platforms.

- 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
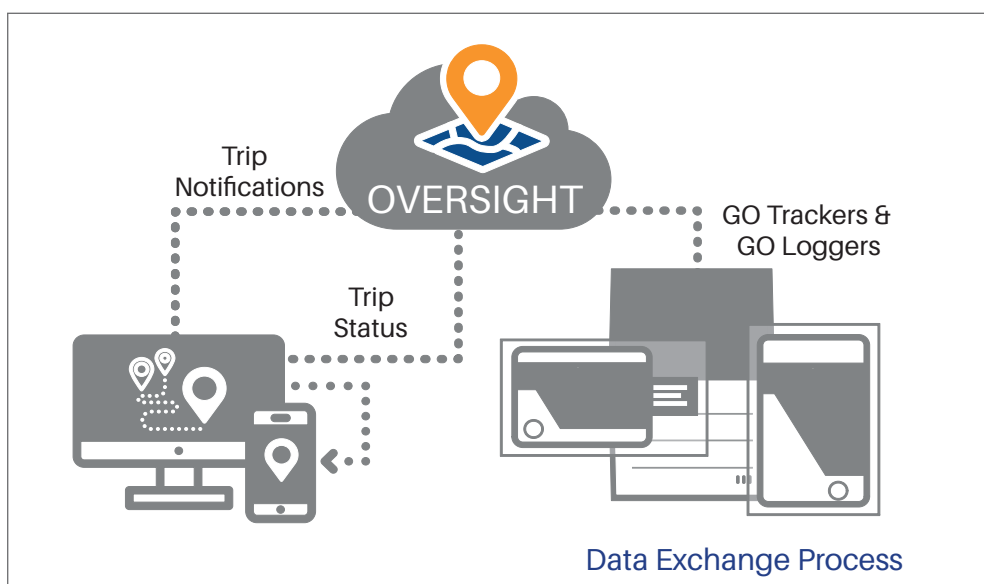
Trip Notifications

OVERSIGHT

GO Trackers &
GO Loggers

Trip
Status

Data Exchange Process

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.

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To learn more, visit copeland.com

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