

# Cold Chain Solutions

Real-time Data to Drive a Sustainable and Efficient Cold Chain Operation

## Overview

Cold Chain Logistics comes with all of the challenges of any logistics operation and the added complexity of needing to manage, control, and report temperature from origin to destination. Due to a lack of real-time temperature data and ability to remotely control the reefer unit, spoilage and physical damage to goods often occurs, leading to reduced confidence from your customers. Cold chain integrity is vital to customer satisfaction, but without the right technology you are dealing with costly recalls, rejected deliveries, and immense waste on a daily basis. The consequences of not being equipped to handle this operation are lower margins, lower customer satisfaction, inability to reach sustainability goals, and higher liability.



# Solution at a Glance



## Temperature Monitoring and Control

With Powerfleet, you can experience easy-to-use tools to effectively monitor and control your cargo's condition. Our temperature monitoring and control solutions support single pallets up to multi-compartment refrigerated trailers, with options for audible in-cab and control room alarms, insight into deviations from pre-defined humidity or temperature thresholds, and remote control of on/off and temperature set point, across both Carrier® and Thermo King® reefers.



## ELD/HOS

Real-time driver performance, safety, and HOS information combined with vehicle performance and route status updates provides operational awareness critical to maximizing your fleet efficiency and customer satisfaction. Our solution continuously captures critical ELD compliance information and connects mobile devices and tablets to extend functionality outside the cab so your driver is always connected to the system, even when away from the vehicle.



## Landmark, Location, and Asset Analysis

Your organization may manage a large inventory of rolling stock, remotely distributed over states and even countries. Losing track of this inventory is not an option. Powerfleet provides you with powerful virtual yard management capabilities to keep your yard secure and accounted for. Our yard check capability enables you to understand how many assets are in a specific geographical location, view an asset's location in the yard, select the closest asset, and locate them by condition (empty, loaded, dormant). Our cargo status capability accurately and reliably presents you with the percent load status, enables you to see an image of insight the vehicle, and collect critical conditions, such as temperature and doors. Furthermore, our search capability enables you to receive an asset's latest event status and pull a list of trailers with conditions, such as landmark, dormant timeframe, loaded, and empty.



## Vehicle and Asset Visibility

Achieve complete visibility of your vehicles and assets with Powerfleet's solutions. We help you locate vehicles by type, status, events, and availability as well as provide you with insights into vehicle usage and historical events by location.



## Utilization

Right from the start, Powerfleet enables you to cut costs and gain control of your asset, vehicle, and people utilization. Reducing idling and revving and improving load management can help you decrease fuel consumption. You can achieve this through proactive maintenance scheduling, which ensures greater fleet utilization and decreased down time. In addition, our solutions enable you to control and monitor the conditions of the goods in the warehouse as well as on the road - thus preventing them from being compromised or spoiled. We help you to sustainably save across your fleet immediately and continue to increase your savings over time.



## Third Party Integration

Powerfleet makes integration simple and easy by offering a flexible API platform, data export, or ingestion option. This allows you to integrate real-time temperature data and visibility of assets, vehicles, and people with all required third-party business systems.



## Data Insights and Analytics

Just having access to data isn't enough. Having historical and real-time temperature data insights helps you make carrier selections based on performance, set temperatures based on seasonality, and understand trends across your reefer assets.

# Key Features

- Complete range of cold chain solutions from simple monitoring to full control
- Temperature, humidity, door status, and fuel level sensing and logging
- Cold chain, dry van, and in-cab fleet management in a single pane of glass
- Seamless bi-directional integration with Carrier® Transicold and Thermo King® chillers allows users to remotely control the reefer unit, thus eliminating frequent driver interaction
- Automatically set temperature of compartment(s) based on commodity type
- Ability to manage the reefer engine, alarms, and sensors remotely, without the reefer trailer being tethered to a tractor
- 24/7 refrigeration unit fuel level visibility to manage fuel operations and detect fuel theft or leaks
- Optional satellite location and refrigeration unit status reporting if cellular data network is unavailable

Powerfleet's cold chain solutions are part of our Unity platform, which also features fleet management solutions including safety and security, advanced fuel management, maintenance and performance, regulatory management and compliance, visibility and resource management, and sustainability.

## Results

With Powerfleet's SaaS-based cold chain solutions and integrations with all major refrigeration unit brands, you can track in real-time, as well as monitor temperature across the entire delivery journey. Our internal cameras and asset monitors detect movement, humidity, and provide camera visibility, eliminating overpacking, physical damage, and spoilage troubles.

Powerfleet's solutions also provide regular recordings of container temperatures that need to be delivered within a specific range, allowing your drivers to quickly act before a real problem occurs. Our technology measures ambient temperature and door openings through multiple wireless sensors that regulate different sections of the vehicle based on the size. With digital logs, it is now easier for your drivers to prove food shipments were kept at safe temperatures, decreasing compliance issues, and ensuring adherence to FSMA safety regulations.

Powerfleet's complete cold chain platform unites IoT tracking devices, reefers and temperature sensors along with a purpose-built smart trailer solution to reduce waste, lower costs, achieve sustainability goals, and improve customer service.

Powerfleet (NASDAQ: PWFL; TASE: PWFL) is a global leader of internet of things (IoT) software-as-a-service (SaaS) solutions that optimize the performance of mobile assets and resources to unify business operations. Our data science insights and advanced modular software solutions help drive digital transformation through our customers' and partners' ecosystems to help save lives, time, and money. We help connect companies, enabling customers and their customers to realize more effective strategies and results. Powerfleet's tenured and talented team is at the heart of our approach to partnership and tangible success. The company is headquartered in Woodcliff Lake, New Jersey, with our Pointer Innovation Center (PIC) in Israel and field offices around the globe. For more information, please visit [www.powerfleet.com](http://www.powerfleet.com).