

CONTAINER, CHASSIS, AND TRAILER TRACKING

ASSET TRACKING

# Cold Chain Gateway

Dual-Mode Communication for Continuous Real-Time Reefer Monitoring and Control

The **Cold Chain Gateway** is Powerfleet's cellular and optional satellite-backup, dual-mode communication device, for monitoring and remotely controlling refrigerated trailers and cargo. The Cold Chain Gateway utilises 4G/LTE cellular data as its primary two-way communication mode, with the option for global satellite communication from Iridium® as a backup. This ensures reliable transmission of critical data.

The optional satellite backup provides continuous coverage in scenarios where there are cellular network issues, cross-border operations, or during natural disasters and extreme weather conditions.

The Cold Chain Gateway enables remote configuration of refrigeration units in real time and provides valuable operational data such as location, temperature set point(s), inlet and outlet air temperature(s), fuel level, and alarm events.

With instant notifications, it ensures compliance with food safety regulations and supports sustainable and efficient cold chain operations.

Furthermore, the Cold Chain Gateway, in conjunction with standalone wireless temperature sensors can monitor the

status of the refrigeration unit controller.

It helps decrease safety incidents by triggering speed and access control, detection of high-risk areas by identifying near-miss events, driver coaching, and more.

This offers a more cost-effective and streamlined solution for maintaining cargo within specified temperature range(s), eliminating the need for complete integration of a refrigeration unit controller.

Powerfleet's Cold Chain Gateway integrates with Unity, our SaaS-based fleet intelligence platform that ingests, processes, and consolidates data from every asset, vehicle, and person. Through advanced data intelligence, Unity unifies business operations.

## Key features



Remotely monitor and control refrigeration unit on/off, alarms, and sensors without the reefer trailer being connected to tractor power



Seamless bi-directional integration with Carrier® Transicold and Thermo King® refrigeration units



Independent wireless temperature sensing and detection of reefer controller on/off status, eliminating the need for expensive reefer controller integration



View and alert on refrigeration and Independent temperature sensors



View hitched/unhitched and door open/ closed status



GPS trailer location and movement tracking



Geofencing for real-time arrival and departure times reporting



Landmark reporting with fuel level capture upon arrival and departure



Commodity-based set point management and alerting



Commodity-based alarm with optional automated assignment



## Designed to Revolutionise Your Logistics Operations

The **Cold Chain Gateway** offers a wide range of operations-relevant asset and reefer management features designed to revolutionise operations:



Early issue identification & resolution



Avoid commodity loss



Adhere to compliance standards



Increase productivity



Lower operating costs



Improve safety



Reduce fuel consumption



Achieve sustainability goals



Drive continuous improvement



Improve customer service

## Technical Specifications

### Communication

Cellular Technology	4G/LTE, 3G Fall back, EC21-A Modem LTE FDD: B2/B4/B12
Cellular Data Rates	Download 20 Mbps, Upload 15 Mbps
SIM	Mini (2FF) SIM Card Size
Satellite	Iridium Edge modem and satellite network

### BLE

BLE Technology	BLE 4.1 / 2.4GHz
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### Global Positioning

Type	Internal Module SiRFstarIV, M10478-A3, 66 channels
Sensitivity	-165 dBm
TTFF @ -130dB	Cold <27 Sec, Warm <10 Sec, Hot <1 Sec
Internal Antenna	Internal

### Inputs & Outputs

Inputs	Digital Input: 2 ports up to 4 ports (optional) Digital Output: 2 ports (Voltage level fixed) Analog input: 3 ch, 1-bit (Voltage range fixed) Serial Port (RS232): 1 COM Port up to 2 Ports (optional) Dallas One-Wire
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## Technical Specifications (cont'd)

### Interfaces

CAN	J1939
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### Power

Input Voltage	10 – 16 VDC
Consumption	42.5 mA nominal @ 12 VDC
Low Voltage Cutoff	Reefer Voltage < 10 VDC (configurable)

### Environmental

Temp, operation	-30°C - +85°C
Temp, storage	-40°C to +85°C
Ingress Protection	IP67

### Certifications

Communication	FCC, CE
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### Size

Dimensions	118 mm x 133 mm x 36 mm
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### Installation

Connections	12-pin, male
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# Technical Specifications (cont'd)

## Features

Movement	Built in 3-axis accelerometer ( $\pm 2/8g$ )
Geofence	100 On-board Geo-fences

Powerfleet (Nasdaq: PWFL; JSE: PWR; TASE: PWFL) is a global leader in the artificial intelligence of things (AIoT) software-as-a-service (SaaS) mobile asset industry. With more than 30 years of experience, Powerfleet unifies business operations through the ingestion, harmonisation, and integration of data, irrespective of source, and delivers actionable insights to help companies save lives, time, and money. Powerfleet's ethos transcends our data ecosystem and commitment to innovation; our people-centric approach empowers our customers to realise impactful and sustained business improvement. The company is headquartered in New Jersey, United States, with offices around the globe. Explore more at [www.powerfleet.com](http://www.powerfleet.com).