

VEHICLE TELEMATICS

Vehicle Gateway Enterprise

Intelligent Fleet Management with Dual CAN Interface

Description

The **Vehicle Gateway Enterprise** is part of an advanced fleet management solution that utilizes a smart algorithm to combine data from various vehicle environment interfaces. Based on the LTE CAT M1 network, it supports multiple standard protocols and interfaces simultaneously, using two separate CAN channels that enable driver identification, serial communication with third party devices, a wide range of measurement ports, and more.

All these interfaces are designed and configured for maximum flexibility with CAN data aggregation, filtering, processing, and event triggering.

Our Vehicle Gateway Enterprise provides advanced multi-source data, which is ingested into Unity, Powerfleet's fleet intelligence platform.

Unity's Cognitive Data Engine cleanses, harmonizes, and enriches this data to provide you with real-world, actionable insights to lower fuel consumption, reduce warranty expenses, increase safety habits, and optimize maintenance processes.



Key Features

- LTE CAT M1 WW with 2G fallback
- Plug and play connectivity
- Comprehensive and evolving vehicle library support
- BLE 5.2
- Onboard Driver ID Storage
- Fuel consumption calculation
- Customizable CAN data rules engine to configure collection of vehicle diagnostics
- AutoCAN for automatic vehicle model configuration
- Identify Aging and low performing vehicles suitable for conversion
- Prepare ESG reports with carbon emissions reporting



Advanced crash detection and reconstruction



Dual CANBUS interface



Analyze fuel and energy usage for budget planning



Designed to Revolutionize Your Fleet Operations

The **Vehicle Gateway Enterprise** offers a broad array of business-relevant fleet management features designed to revolutionize your fleet operations:

- Reduce safety incidents
- Shrink operating costs
- Mitigate liability
- Increase longevity of assets
- Achieve sustainability goals
- Adhere to compliance standards

Technical Specifications

Communication

Cellular Technology	LTE CAT M1 WW with 2G Fallback 4G Bands: CAT M1: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B26, B28 2G Bands: GSM850, GSM900, DCS1800, PCS1900
Cellular Data Rates	CAT M1: uplink up to 375kbps, downlink up to 300kbps 2G (EGPRS): uplink up to 236kbps, downlink up to 296kbps
SIM	Nano SIM, Internal, replaceable
SMS	PDU, text SMS for data forwarding

BLE

BLE Technology	Bluetooth® 5.2 Low Energy Serial over BLE
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Global Positioning

Type	GNSS
Sensitivity	High sensitivity: -165dBm during tracking, -148dBm during acquisition
DGPS	DGPS, SBAS (WAAS/ EGNOS/ MSAS/ GAGAN)
TTFF @ -130dB	Cold Start: <30s, Warm Start: <2s, Hot Start: <2s Cold <35Sec, Warm<35Sec, Hot<1Sec
Internal Antenna	On board
External Antenna	Optional

Inputs & Outputs

Inputs	4
Outputs	4
Configurable I/Os	2
Ignition	Yes

Technical Specifications (cont'd)

Interfaces

COM port	1 x RS232
J-1708	1
USB	1 x Micro USB (Type B)
CAN	2xCAN HS interface CAN FD HW readiness CAN-H, CAN-L signals J1939 Standard Data Bus Interface ISO 15765 for OBDII connectivity ISO 11783 Standard Data Bus Interface
Single Wire CAN	1
K-Line interface	A bi-directional one-wire-bus interface compliant with ISO 9141-2 and ISO 14230 1&2

Power

Input Voltage	9-32VDC
Internal Battery	Li-Ion Polymer, 3.7V, 1Ah, rechargeable

Environmental

Temp, operation	-30°C to 70°C (-22°F to 158°F) full performance
Temp, storage	-40°C to 85°C (-40°F to 185°F)
Humidity	95% non-condensing
Ingress Protection	IP40
Vibration, Impact	ISO 16750
Power transients	ISO 7637 Test level 4 (e-mark directives compliant)

Certifications

Communication	FCC Part 15 Subpart B, part 22/24 compliant
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Technical Specifications (cont'd)

Size

Dimensions	104 x 86 x 26.9mm (4.09 x 3.39 x 1.06in)
Weight	140gr (4.94oz)

Installation

Mounting	Tie-wraps and/or double-sided adhesive
Connections	14-Pin, 18-Pin, OBD-II, or J1939

Features

Movement	3D Accelerometer
Use Cases	Driver Behavior, Crash Detection, Eco Scoring, Safety Scoring, Immobilization, Driver Identification (Dallas, iButton, Keypad), Car Sharing, Proactive Maintenance and Remote Diagnostics
Capabilities	Trip Detection, Ignition Status (motion or ignition wire), Speeding, Idling, Odometer, Fuel, DTC, Extensive CAN Bus Data, AutoCAN Configuration, BLE Sensor Integration, GPIO Integration, FOTA
Geofence	Up to 100 Geofences

Accessories

- Contactless Adapter
- 1-Wire Proximity Reader
- 10-Digit Keypad
- 1-Wire Dallas Reader
- 1-Wire Temperature Sensor
- BLE Sensors

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.