

## VEHICLE TELEMATICS

# Vehicle Gateway S

Compact, LTE-Based Fleet Management Enabler with CAN Capabilities

## Description

The **Vehicle Gateway S** is Powerfleet's entry to mid-level fleet and security management device, suitable for a wide range of use cases, including:

- Real-time tracking
- Stolen vehicle recovery
- Driver identification and theft deterrence
- Basic driver behavior monitoring
- CAN-based telematics for preventative maintenance.

With its low entry cost, CAN capabilities, and configurable I/O, this device can be positioned as either a primary onboard computer (OBC) or a backup tracking unit, to be paired with a more premium offering from the Vehicle Gateway product line.

Featuring an input voltage range of 9-90V and a CAN interface, this product is specifically designed to accommodate a wide array of vehicles, ranging from two/three-wheeled lightweight vehicles like scooters and e-bikes to traditional cars and trucks.

Its compact form factor, IP65 protection, and built-in non-removable harness ensure easy installation and make it suitable for challenging environments.

Powerfleet's Vehicle Gateway S integrates with Unity, our SaaS-based fleet intelligence platform that ingests, processes, and enriches data from every asset, vehicle, and person. It helps increase safety, reduce theft, meet compliance, enhance billing, simplify maintenance and more.



## Key Features

- LTE CAT-1 with 2G fallback (EMEA, APAC, LATAM).
- Rechargeable backup battery.
- CAN 2.0 OBD-II and J1939-compatible to obtain data from the vehicle's CANBUS (vehicle status, fuel level, tire status etc.) with configurable data sampling rules.
- Dual color LED for Cellular/GNSS installation validation indication.
- Basic driver behavior monitoring capabilities including harsh acceleration, harsh braking, harsh turn, over speeding and accident detection.
- Up to 100 Geo-Fences.
- 1-wire interface for driver authentication.
- Built-in motion sensor for movement & towing detection.
- Internal memory for offline storage to log up to 7,300 events.
- Built-in BLE connectivity for cable-free

firmware upgrades and configuration updates.

- Advanced capabilities including:
  - Crash Detection
  - Odometer
  - Jamming Detection
  - Tilt Tamper
  - Immobilization



**IP65 – suitable for rough, outdoor environmental conditions**



**CAN interface**



**9-90V**



**Plug-and-play modular harness compatible with various systems, such as OBD-II**



## Designed to Revolutionize Your Fleet Operations

The **Vehicle Gateway S** offers a broad array of business-relevant features designed to revolutionize your fleet of small and lightweight vehicles:

- Improve security and Stolen Vehicle Recovery (SVR)
- Reduce safety incidents
- Shrink operating costs
- Mitigate liability
- Increase longevity of assets
- Achieve sustainability goals

# Technical Specifications

## Cellular Communication

Modem	LTE CAT-1 with 2G fallback (EMEA)	LTE CAT-1 with 2G fallback (LATAM/NZ/AU)
Supported Technologies & Bands	<ul style="list-style-type: none"> <li>LTE-FDD Bands: B1, B3, B5, B7, B8, B20, B28</li> <li>LTE-TDD Bands: B38, B40, B41</li> <li>2G Bands: B2, B3, B5, B8</li> </ul>	<ul style="list-style-type: none"> <li>LTE-FDD Bands: B1, B2, B3, B4, B5, B7, B8, B28, B66</li> <li>LTE-TDD Bands: B38, B40, B41</li> <li>2G Bands: B2, B3, B5, B8</li> </ul>
Regulatory	<ul style="list-style-type: none"> <li>Europe: CE</li> <li>Australia/New Zealand: RCM</li> <li>South Africa: ICASA (pending)</li> </ul>	<ul style="list-style-type: none"> <li>Mexico: Telcel (pending)</li> <li>Argentina: Claro (pending)</li> <li>Brazil: Anatel</li> </ul>
Data Rates	LTE-FDD: uplink up to 5 Mbps, downlink up to 10 Mbps LTE-TDD: uplink up to 3.1 Mbps, downlink up to 8.96 Mbps GSM/2G: uplink up to 85.6 kbps, downlink up to 85.6 kbps	
SIM Card Compatibility	Nano SIM and e-SIM (Optional)	
Antenna	Internal	
Pocket Data	TCP/IP or UDP/IP	
SMS	PDU	

## Local Communication Interfaces

BLE	BLE 4.2 Wireless Connectivity
Wi-Fi	2.4 GHz 11b (RX). Wi-Fi Scan only (optional, Used for positioning purposes)
Serial Communication	TTL for Configuration and firmware upgrades
1-Wire™ (Dallas) Input	DS1990A, DS1971 compliant for driver management

## Global Positioning

GNSS	GPS, BeiDou and Galileo
Sensitivity (Tracking)	-160 dBm

## Technical Specifications (cont'd)

Acquisition Average TTFF	Cold Start: 30s, Hot Start: < 2s. A-GPS capabilities
Antenna	Internal

### Inputs & Outputs

Multipurpose Inputs/Outputs	2
Digital Inputs	2
Ignition switch Input	1 (also analog input 9-90V)
CAN FD	1 (CAN2.0 ISO 11898, J1939, FMS)

### Accelerometer

Internal	3D, +/- 32g range, 14-bit representation, 1mg resolution
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### User Interface

Dual Color LED	GNSS, Cellular Connectivity and power status LED
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### Power

Input Voltage (Vehicle Power)	9-90VDC
Internal Backup Battery	Li-ion Polymer, 3,7V, 200mAh, rechargeable

### Vehicle Environment Immunity

Immunity	Compliant with ISO 7637 till test level #4 (In accordance with E-mark directive)
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### Applicable Environmental Conditions

Operating Temperature	-30°C to 40°C (-22°F to 104°F) full performance (External Power)
Storage Temperature	-20°C to 45°C (-40°F to 185°F)
Humidity	95% non-condensing

## Technical Specifications (cont'd)

Ingress Protection	IP65
Climatic, Vibration, Impact	ISO 16750

## Vehicle Installation Methods

Mounting	Tie-Wraps and/or Double-Sided Adhesive Tape
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## Environmental Protection

RoHS	Directive 2011/65/EU, including Directive (EU) 2015/863 amendment
Conflict Minerals Law	Production Conformity with U.S. Conflict Materials provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act, HR 4173, Section 1502 (Conflict Minerals Act)

## Dimensions and Weight

Dimensions	90 x 43.9 x 24.4mm (3.50 x 1.71 x 0.96in)
Weight	88gr (3.54 oz) (with harness and battery)
Movement	3D Accelerometer
Use Cases	Crash Detection, Immobilization, Driver Identification, Vehicle Tracking and Recovery
Capabilities	Trip Detection, Ignition Status (motion or ignition wire), Speeding, Idling, Odometer, BLE Sensor Integration, GPIO Integration, FOTA
Geofences	Output control using onboard geofences and driver IDs (up to 100 each)

## Accessories

- 1-Wire (Dallas Reader/Temperature Sensor)

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, harmonization, 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 realize 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).

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