

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 | LTE-FDD Bands: B1, B3, B5, B7, B8, B20, B28 LTE-TDD Bands: B38, B40, B41 2G Bands: B2, B3, B5, B8 | LTE-FDD Bands: B1, B2, B3, B4, B5, B7, B8, B28, B66 LTE-TDD Bands: B38, B40, B41 2G Bands: B2, B3, B5, B8 |
| Regulatory | Europe: CE Australia/New Zealand: RCM South Africa: ICASA (pending) | Mexico: Telcel (pending)Argentina: Claro (pending)Brazil: Anatel |
| Data Rates | LTE-FDD: uplink up to 5 Mbps, down LTE-TDD: uplink up to 3.1 Mbps, down GSM/2G: uplink up to 85.6 kbps, do | wnlink up to 8.96 Mpbs |
| 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, BeiDouand 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 | |
|---|--|
|---|--|

User Interface

| Dual Color LED | GNSS, Cellular Connectivity and power status LED |
|----------------|--|
| | |

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 70°C (-22°F to 158°F) full performance (External Power) |
|-----------------------|--|
| Storage Temperature | -20°C to 45°C (-4°F to 113°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 |
|----------|---|
|----------|---|

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 | 90.3 x 47.21 x 24.4mm (3.55 x 1.85 x 0.96in) |
|--------------|---|
| Weight | 88gr (3.54 oz) (with harness and bettery) |
| 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 (AloT) 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.