

VEHICLE TELEMATICS

Vehicle Gateway

LTE-based Fleet Management Device with Configurable GPIO & Essential Maneuver Detection Capabilities

Description

The **Vehicle Gateway** is Powerfleet's fleet and security management device that runs on the LTE network. It is a high quality, yet cost-effective and easy to install device with LED indicators. It is equipped with a large capacity, rechargeable backup battery (1000mAh) and includes collision detection, basic driver behavior capabilities and built-in motion sensors. The sensor enables movement and towing detection to ensure improved compliance with vehicle security requirements.

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



Key Features

- Basic driver behavior monitoring capabilities including harsh acceleration, harsh braking, harsh turn, over speeding and accident detection
- 2 LEDs for Cellular/GNSS installation validation indication
- Memory that can store up to 7,000 logged events in offline scenarios
- I/Os: configurable inputs and outputs including dedicated ignition switch, RS-232 serial port and 1-wire interface
- Additional advanced capabilities:
 - Up to 100 Geo-Fences
 - Cell-ID based geo location (alternative to GNSS when not available)
 - Curve smoothing
- Built-in BLE connectivity (exclusive to CAT M1 variant only, not available in CAT-1 or CAT M1 Lite versions)



Crash detection, motion sensors & towing detection



Large capacity 1000mAh internal backup battery



Designed to Revolutionize Your Fleet Operations

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

- Improve security and Stolen Vehicle Recovery (SVR)
- Reduce safety incidents
- Shrink operating costs
- Mitigate liability
- Increase longevity of assets
- Adhere to compliance standards

Technical Specifications

Communication	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Cellular Technology	LTE CAT M1 with 2G Fallback (Worldwide) 4G Bands: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B26, B28 2G Bands: B2, B3, B5, B8	LTE CAT-1 with 3G/2G fallback (LATAM) 4G Bands: B1, B2, B3, B4, B5, B6, B7, B28 3G Bands: B1, B2, B3, B4 2G Bands: B2, B3, B5, B8	LTE CAT M1 with 2G Fallback (Worldwide) 4G Bands: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B26, B28 2G Bands: B2, B3, B5, B8
Cellular Data Rates	LTE CAT M1: uplink up to 375 kbps, downlink up to 300 kbps	LTE CAT-1: uplink up to 5Mbps, downlink up to 10Mbps 2G (EGPRS): uplink up to 236kbps, downlink up to 296kbps	LTE CAT M1: uplink up to 375 kbps, downlink up to 300 kbps 2G (EGPRS): uplink up to 236kbps, downlink up to 296kbps
SIM	Nano SIM, internal, replaceable. eSIM available		
Antenna	Internal		
Packet Data	TCP/IP or UDP/IP		
SMS	PDU		

BLE	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
BLE Technology	Secure BLE 4, BLE 5.1 Ready (BLE is Available on the CAT-M variant only)		

Technical Specifications (cont'd)

Global Positioning	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Type	GNSS		
Sensitivity	High sensitivity: -165dBm during tracking, -148dBm during acquisition		
TTFF @ -120dB	Cold Start: <30s, Warm Start: <2s, Hot Start: <2s Cold <35Sec, Warm<35Sec, Hot<1Sec		
Internal Antenna	On board		

Inputs and Outputs	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Inputs	2	2	
Configurable I/Os	2		4
Ignition	Yes		
1-Wire	Dallas Button, Proximity Reader, Temperature Sensor, Keypad		Dallas Button, Proximity Reader, Keypad

Interfaces	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
COM Port	1 x RS232		1 x TTL

Power	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Input Voltage	9-32VDC		
Internal Battery	Li-Ion Polymer, 3.7V, 1Ah, rechargeable		

Technical Specifications (cont'd)

Environmental	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
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	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Communication	FCC Part 15 Subpart B, part 22/24 compliant		

User Interface	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
LEDs	2 LEDs for Cellular/GNSS installation validation indication		

Size	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Dimensions	90.8 x 70.5 x 22.9 mm (3.57 x 2.78 x 0.90in)		
Weight	130gr (4.59oz)		

Installation	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Mounting	Tie-wraps and/or double-sided adhesive		
Connections	10-Pin wired		

Technical Specifications (cont'd)

Features	Vehicle Gateway LTE CAT M1	Vehicle Gateway LTE CAT-1	Vehicle Gateway Lite LTE CAT M1
Movement	3D Accelerometer		
Use Cases	Basic Driver Behavior, 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	Trip Detection, Ignition Status (motion or ignition wire), Speeding, Idling, Odometer, GPIO Integration, FOTA	
Geofence	Up to 100 Geofences		

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.