

VEHICLE TELEMATICS

Micromobility Gateway

Compact, LTE-Based Micromobility Device with BLE Connectivity

Description

The **Micromobility Gateway**, available in two versions namely the Micromobility Gateway and Micromobility Gateway Enterprise, serves as Powerfleet's fleet and security management device. These variants cater to different vehicle types, with the Micromobility Gateway featuring an input voltage range of 9-32V and the Micromobility Gateway Enterprise offering 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, IP67 protection, and built-in non-removable harness ensure easy installation and make it suitable for challenging environments.

The Micromobility Gateway incorporates GNSS for location tracking, alongside collision detection,

basic driver behavior capabilities, and built-in motion sensors. These combined features enable effective movement and towing detection, ultimately ensuring enhanced compliance with vehicle security requirements.

Powerfleet's Micromobility Gateway 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)
- Built-in BLE connectivity
- Rechargeable backup battery
- CAN interface* to obtain data from the vehicle's CANBUS (vehicle status, fuel level, tire status etc.)
- 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 50 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

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



IP67 – suitable for rough, outdoor environmental conditions



CAN interface



9-90V

*Micromobility Gateway Enterprise only

Designed to Revolutionize Your Fleet Operations

The **Micromobility Gateway** 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

Communications

	Micromobility Gateway	Micromobility Gateway Enterprise
Cellular Technology	Variant 1 LTE CAT-1 with 2G fallback (EMEA) LTE-FDD Bands: B1, B3, B5, B7, B8, B20, B28 LTE-TDD Bands: B38, B40, B41 2G Bands: B2, B3, B5, B8 Variant 2 LTE CAT-1 with 2G fallback (Australia/LATAM) LTE-FDD Bands: B1, B2, B3, B4, B5, B7, B8, B28, B66 LTE-TDD Bands: B38, B40, B41 2G Bands: B2, B3, B5, B8	
Cellular 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	Nano SIM. eSIM available	
Antenna	Internal	
Packet Data	TCP/IP or UDP/IP	
SMS	PDU	

BLE

	Micromobility Gateway	Micromobility Gateway Enterprise
BLE	BLE 4.2	

Global Positioning

	Micromobility Gateway	Micromobility Gateway Enterprise
Type	GNSS	
Sensitivity	-160 dBm	
TTFF @ -130dB	Cold Start: <30s, Hot Start: <2s, A-GPS capabilities	
Internal Antenna	On-board	

Technical Specifications (cont'd)

Inputs & Outputs	Micromobility Gateway	Micromobility Gateway Enterprise
Inputs	2 Analog inputs and 1 Ignition/ Analog Input	
Configurable I/Os	2 Digital I/Os	
Ignition	Yes (also Analog input 0-32V)	Yes (also Analog input 0-90V)

Interfaces	Micromobility Gateway	Micromobility Gateway Enterprise
COM port	1 x TTL	
CAN		1xCAN FD interface CAN-H, CAN-L signals ISO 11898-1 to -6 Standard Data Bus Interface

Power	Micromobility Gateway	Micromobility Gateway Enterprise
Input Voltage	9-32VDC	9-90VDC
Internal Battery	Li-Ion Polymer, 3.7V, 200mAh, rechargeable	

Environmental	Micromobility Gateway	Micromobility Gateway Enterprise
Temp, operation	-30°C to 40°C (-22°F to 104°F) full performance	
Temp, storage	-20°C to 45°C (-40°F to 185°F)	
Humidity	95% non-condensing	
Ingress Protection	IP67	
Vibration, Impact	ISO 16750	
Power transients	ISO 7637 Test level 4 (e-mark directives compliant)	

Certifications	Micromobility Gateway	Micromobility Gateway Enterprise
Communication	CE, RCM, Anatel, FCC	

Technical Specifications (cont'd)

User Interface	Micromobility Gateway	Micromobility Gateway Enterprise
LEDs	Dual color LED for Cellular/GNSS installation validation indication	

Size	Micromobility Gateway	Micromobility Gateway Enterprise
Dimensions	90 x 43.9 x 24.4 mm (3.50 x 1.71 x 0.96in)	
Weight	88gr (3.54 oz)	

Installation	Micromobility Gateway	Micromobility Gateway Enterprise
Mounting	Tie-wraps and/or double-sided adhesive	

Features	Micromobility Gateway	Micromobility Gateway Enterprise
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	
Geofence	Up to 50 Geofences	

Accessories

- 1-Wire (Dallas Reader/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.