**POWER⊗FLEET**®

MATERIAL HANDLING TELEMATICS

# Forklift Gateway (VAC)

## Industrial Truck Fleet and Operator Management

The **Forklift Gateway (VAC)** provides wireless, automated tracking, monitoring, management and control of powered industrial vehicles and the operators who use them. The device is securely mounted and seamlessly integrated into forklifts or other industrial vehicles. It effectively manages access privileges, determining who, when, and how individuals can interact with the vehicle, all based on the unique driver identification.

Upon successful authentication, the Forklift Gateway (VAC) enforces mandatory pre-use inspections, guaranteeing adherence to safety protocols. It establishes a connection with a machine-learning impact sensor, mounted on the forklift frame, enabling detection of potential damage.

Moreover, it continuously monitors key performance data of the forklift to facilitate optimisation and maintenance controls. For added functionality, the Forklift Gateway (VAC) offers the flexibility to connect with optional external sensors and cameras, including DVR, speed, load, GPS location, pedestrian proximity detection, etc.

The solution enhances material handling operations by ensuring accountability, optimising equipment placement, streamlining workflows, and measuring vehicle maintenance and utilisation.

The Forklift Gateway (VAC) can integrate with Powerfleet's SaaS-based fleet intelligence platform that ingests, processes, and enriches data from every asset, vehicle, and person, and helps realise improved maintenance and performance.

# Key features

**Integrated micro-computer** with highly configurable firmware to accommodate any wireless communication needs

Supports nearly all **wireless access control ID types** and a keypad for entry

Various optional sensors available (GPS, impact, speed/distance, loaded/unloaded, pedestrian proximity detection, etc.)

Provides electronic, multi-lingual safety checklists

Installs on virtually any industrial vehicle (forklifts, tow tractors, etc.)

Constant wireless connectivity not required

**All components**
(antennae, card reader, etc.) protected inside the Forklift Gateway

# Designed to **revolutionise** your **material handling operations**

The **Forklift Gateway (VAC)** offers a broad array of features designed to digitalise, normalise and revolutionise your material handling operations:

- Shrink operating costs
- Increase safety
- Optimise asset, vehicle, and people utilisation
- Mitigate liability
- Adhere to compliance standards
- Increase longevity of assets
- Protect brand reputation
- Boost employee morale

**Learn more at www.powerfleet.com**

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# Technical Specifications

## Communication

| | |
|---|---|
| Wi-Fi Standards | 802.11 b/g/n |
| Wi-Fi Frequencies | 2.412-2.484 GHz5.18-5.32 GHz; 5.5-5.825 GHz |
| Wi-Fi Channels | 1-11 (US); 1-13 (EU); 1-14 (JPN); 36-64, 100-165 (US/EU) |
| Wi-Fi Bandwidth | 20/40 MHz |
| Wi-Fi Modulation | DSSS |
| Wi-Fi Tx / Rx | 18 dBm, -97 dBm |
| Wi-Fi Range | Up to 300 ft (100 m) |
| Wi-Fi WLAN Security Settings | Open, WEP-64, WEP-128, WPA- PSK (TKIP), WPA2-PSK (AES), WPA-EM (PEAP-MSCHAPv2), WPA2-EM (PEAP-MSCHAPv2) |
| Wi-Fi Encryption | TLS 1.2 |
| Antenna | Internal |
| Packet Data | TCP/IP or UDP/IP |

## Global positioning

| | |
|---|---|
| Type | GPS |
| Sensitivity | High sensitivity |
| TTFF @-130dB | Cold < 35 Sec, Warm< 25 Sec, Hot< 2 Sec |
| External Antenna | Required |

## Inputs & Outputs

| | |
|---|---|
| Inputs | 12 |
| Outputs | 2 |
| Configurable I/Os | 13 |

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# Technical Specifications (cont'd)

## Interfaces

| | |
|---|---|
| COM port | 1 x RS232 |
| CAN | 1xCAN HS interface<br>CAN-H, CAN-L signals<br>ISO 11898-1 to -6 Standard Data Bus Interface |

## Power

| | |
|---|---|
| Input Voltage | 9-100 VDC |
| Internal Battery | Coin Cells: 10 years typical life |
| Consumption | 100-280mA [10-40mA] (lower power mode won't drain battery) |

## Environmental

| | |
|---|---|
| Temp, operation | -40° to +85° C (No display below -27° C) |
| Temp, storage | -40° to +85° C (No display below -27° C) |
| Humidity | 95% non-condensing |
| Ingress Protection | IP67, meets NEMA 6 (ANSI/IEC 60529) |
| Vibration, Impact | Vibration: 12.6 G RMS random vibration (MIL-STD-810F)<br>Shock: 20 G and 40 G, 11 msec sawtooth pulse (MIL-STD-810F)<br>Bump: 20 G, 6 msec for 15,000 cycles |

## Certifications

| | |
|---|---|
| Communication | FCC Part 15 Subpart B |
| Electromechanical | CE, RED (EN55032, EN55035, EN12895, EN301489 (1, 3, 17), EN300330, EN300220 (1, 2), EN300238, EN301893, EN303413, EN/IEC 62368-1 |
| Regional | Anatel, cUL, UL558, UL583 |
| Sustainability | RoHS (IEC 63000) |

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# Technical Specifications (cont'd)

## Data Retention

| | |
|---|---|
| Memory | 1 month of data storage while disconnected (typical activity rate) |
| Clock | Real-time |

## User interface

| | |
|---|---|
| LEDs | 4 LED indicators visible up to 100 ft (30 m) |
| Display | Back-lit, graphical monochrome LCD |
| User Authentication | Keypad ID entry or Contactless ID reader (13.56 MHz & 125Khz IDs) |

## Size

| | |
|---|---|
| Dimensions | 4 7/8" x 5 3⁄4" x 2" (124 × 146 × 51 mm) |
| Weight | 1.3 lbs (0.6 kg) |

## Installation

| | |
|---|---|
| Mounting | RAM Mounts Bracket |
| Connections | 10-Pin wired, JPT, P-Plug, VDI |

## Load Weight

| | |
|---|---|
| Accuracy | Within ~250 lbs (~113.25 Kg) |
| Maximum pressure | 3500 psi (240 bar) |

| Accessories | Alarm Lights and Sounders \| Load Sensor \| GPS \| DVR with Cameras \| Pedestrian Proximity AI Cameras \| Fork Cameras Safety Lights \| Speed Sensing and Restrictors \| Weigh Scales |
|---|---|

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, harmonisation, 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 realise 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**.

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