



MATERIAL HANDLING TELEMATICS

Forklift Gateway (VAC)

Industrial Truck Fleet and Operator Management

Description

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 optimization 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, optimizing equipment placement, streamlining workflows, and measuring vehicle maintenance and utilization.

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



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



Constant wireless connectivity not required



Designed to Revolutionize Your Material Handling Operations

The **Forklift Gateway (VAC)** offers a broad array of features designed to digitalize, normalize and revolutionize your material handling operations:

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

Technical Specifications

Communication

Wi-Fi Standards	802.11 b/g/n
Wi-Fi Frequencies	2.412-2.484 GHz; 5.18-5.32 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

Technical Specifications (cont'd)

Interfaces

COM port	1 x RS232
CAN	1xCAN HS interface CAN-H, CAN-L signals 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) Shock: 20 G and 40 G, 11 msec sawtooth pulse (MIL-STD-810F) Bump: 20 G, 6 msec for 15,000 cycles

Technical Specifications (cont'd)

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)

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 x 146 x 51 mm)
Weight	1.3 lbs (0.6 kg)

Technical Specifications (cont'd)

Installation

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

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

Contact Forklift Training Systems for more information.
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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.