

MATERIAL HANDLING TELEMATICS

Pedestrian Proximity Detection

AI-Enabled Vision System for Pedestrian and Vehicle Safety Warning

Description

The **Pedestrian Proximity Detection** is an advanced vision system, that significantly enhances safety measures by proactively preventing accidents, bolstering pedestrian safety, and mitigating potential damage to industrial vehicles. Using automatic object detection, it identifies people and industrial vehicles, alerting operators to potential hazards and imminent danger, thus promoting a safety-focused workplace and maintaining safety standards.

The system can include up to three vehicle-powered cameras equipped with embedded artificial intelligence that can identify select objects. It also features front and rear indicator lights that emit audible and visual warnings when objects breach the vehicle path.

A central wiring box powers the cameras and connects inputs and outputs for zone detection.

When linked to our Forklift Gateway, camera outputs capture event details like breach location, time, and driver identification.

Identifying potential risks without reliance on special apparel or wearable tags makes the Pedestrian Proximity Detection system universal and more reliable. It alerts drivers and pedestrians to avoid health and safety issues and provides management with quantifiable analytics for coaching best practices.

The Pedestrian Proximity Detection system can integrate with Powerfleet's SaaS-based fleet intelligence platform that ingests, processes, and enriches data from every asset, vehicle, and person. It helps decrease safety incidents by triggering speed and access control, detection of high-risk areas by identifying near-miss events, driver coaching, and more.

Key Features

- Up to 5 areas of escalating severity options provide advanced warning and critical action based on proximity to the vehicle
- Activation based on direction of travel to avoid nuisance alarms
- Visual and audible driver notification of risk
- Integration with telematics solutions for vehicle control, mapping, and analysis of events
- 120° field of view per camera



No need for special apparel or wearable tags



Image capture of events



Designed to Revolutionize Pedestrian and Vehicle Safety

The **Pedestrian Proximity Detection** system offers a broad array of business-relevant features designed to revolutionize pedestrian and vehicle safety, and protect your most valuable assets – your people.

- Enhance safety
- Mitigate liability
- Increase longevity of assets
- Protect brand reputation
- Boost employee morale

Technical Specifications

Communication

Cellular Technology	LTE CAT-6 4G Bands: B2/B4/B5/B7/B12/B13/B25/B26/B29/B30/B41/B66/B71
Cellular Data Rates	Uplink up to 50 Mbps, downlonk up to 300 Mbps
Wi-Fi Standards	802.11 b/g/n/ac
Wi-Fi Frequencies	5GHz & 2.4GHz
Wi-Fi Range	Up to 300 ft (100 m)
Wi-Fi WLAN Security Settings	WEP-64, WEP-128, WPA- PSK (TKIP), WPA2-PSK (AES), WPA-Enterprise, WPA2-Enterprise
Wi-Fi Encryption	TCP via HTTPS
Antenna	External
Packet Data	TCP/IP

BLE

BLE Technology	Bluetooth® 5.0 Low Energy Serial over BLE
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Global Positioning

Type	GNSS
External Antenna	Required

Inputs & Outputs

Inputs	5
Outputs	5
Configurable I/Os	8

Technical Specifications (cont'd)

Interfaces

COM port	RS-485
USB	1
CAN	1

Power

Input Voltage	9-48VDC (up to 72VDC with external voltage converter)
Internal Battery	Coin Cells: 5 years typical life
Consumption	2 camera system with alarms: 2A (nominal) 1 camera system with alarm: 1.5A (nominal)

Environmental

Temp, operation	-40° to 50° C
Temp, storage	-40° to 85° C
Humidity	90% relative humidity, non-condensing
Ingress Protection	IP65

Certifications

Communication	FCC Part 15 Subpart B
Electromechanical	CE
Sustainability	RoHS

Technical Specifications (cont'd)

Data Retention

Memory	~30 days of images based on normal usage
Clock	Real-time

User Interface

LEDs	10
Display	Optional 7" display

Size

Dimensions	69.9(W) x 127(H) x 47.2(L) mm; 2.75"(W) x 5" (H) x 1.86" (L) (camera) 148.6(W) x 50.5(H) x 205.6(L) mm; 5.85"(W) x 1.99" (H) x 8.1" (L) (IO Module)
Weight	570 gr; 1.25 Lbs (camera) 1.25 kg; 2.75 Lbs (IO Module)

Installation

Mounting	Magnetic or screwed in using provided brackets
Connections	Multi-wire, connectors and splicing

Technical Specifications (cont'd)

Camera

Video resolution	640 x 480
Recording speed	Configurable; Maximum 2 FPS
Recording type	Events
AV Output	1 HDMI for up to 3 channels
Line of Sight	120 degrees; 3 to 30 ft distance
Event Alarm	70-94 decibels @ 3 feet; Red/Yellow light

Accessories

- Driver Display
- Speed Restriction
- Audible/Visual Alarm

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.