



# 365mesh

**365mesh digital solutions for**

# Retail Sales Industry

*Deeper insights and automation through indoor/outdoor IoT sensors.*

Retail Stores | Supermarkets | Petrol Stations | Convenience Stores

Unlock the full potential of your retail, convenience, and petrol/gas station operations with 365mesh Retail, an Australian-owned, and operated with local manufacturing facilities to supply a comprehensive IoT solution designed specifically for the retail sales industry. 365mesh technology enhances safety and security while driving operational efficiencies that empower store managers to make informed decisions by delivering seamless connectivity and actionable insights, which allows entities to remain ahead in a competitive landscape. Here are just a few of the benefits you can expect from 365mesh Retail IoT solution:



**Advanced video-based analytics** along with IoT sensor integration, enabling seamless automation and control from a single engine.



**24\*7 Video monitoring** with rich alerting and streaming, with offline and online cloud storage and edge processing capabilities to reduce costs and enable superior user experience.



**Data sovereignty**, with all data stored in Australia and owned by the customer, secure end to end encrypted communications



**Improved user's workplace safety**, access control, visitor management and employee attendance.



**Seamless Integration** with extensible plugin modules offering open standards API integration and flexibility and seamless integration with existing customer systems and various other vendors such as Cisco Meraki, Verkada and a raft of others.

Our solution aims to assist businesses with data collection, monitoring, and deeper insights into day to day operational processes, providing seamless automation and providing enhanced visibility across various operations. 365mesh offers advanced surveillance capabilities to accurately detect and track both people and objects, analyse pedestrian flow patterns, and identify abnormal activities, ensuring a safer and more efficient environment.

## What makes us different

- The 365mesh solution incorporates sensors and video cameras that provide deeper insights into existing business operations. The 365mesh solution can be integrated with the user's existing IP cameras already on site, and provides various IoT sensors manufactured within Australia, including integration with various 3rd party sensors (the solution can be seamlessly deployed over existing cameras).
- The 365mesh solution includes advanced rich AI/ML capabilities that can detect and identify objects and movements with extremely high levels of accuracy. The solution is capable of theft detection along with detecting persons of interest and tracking their movements with real time alerting.
- ISO27001 certified: to keep your environment and data safe and secure.



365mesh is Australian owned and operated, with local engineering and manufacturing premises and ongoing maintenance, support and installation teams for any maintenance requirements. We own and operate facilities in Australia and New Zealand, where we manufacture products specifically designed for the unique Australian landscape, accommodating both indoor and outdoor conditions. This local presence allows us to maintain full control over the quality and suitability of our products for the environments in which they are deployed.



# Retail Use Cases



## Advanced Person Detection & Tracking: Real-Time Alerts and Identification of Persons of Interest

Face Search with integration into Active Directory (AD) system, 365mesh utilises facial recognition technology and workwear identification to accurately recognise individuals on-site. This capability enables real-time tracking of their location and facilitates the identification of persons of interest or lost child (recognises individuals on your watch list and tracks their movements throughout the store, with early detection and alerting to store staff, ensuring enhanced security and operational efficiency). With instant alerts triggered by specific movements or behaviours, proactively monitor activities and respond promptly to any unusual situations.

### Behavioral Analysis for In-Store Theft Detection and Similar Capabilities

Closely monitor customer behavior and identify suspicious activities. By leveraging advanced analytics, our system can differentiate between normal shopping patterns and potential theft-related behaviours. With real-time alerts and actionable insights, store personnel can quickly address incidents, reducing losses and improving overall security.



### Face Search with integration into AD

Unlock powerful insights with our Face Search feature, seamlessly integrated into your Active Directory (AD) system. Access a comprehensive library of detected faces, select individuals and view detailed logs of their appearances across footage.

Enhance security protocols and streamline investigations with precise tracking of personnel movements, empowering you to maintain a safe and secure environment.



## **Movement and Activity Analysis: Heatmaps of Customer, Staff, and Crowd Dynamics**

By visualising movement paths and stationary locations, businesses can easily identify high-traffic zones and areas of inactivity. This data helps retailers understand how customers interact with product displays and navigate the space, enabling them to optimise store layout and enhance the overall shopping experience. Moreover, optimise staff deployment and make data-driven decisions that drive sales and enhance customer satisfaction.



## **People Counting with Advanced Demographic Insights**

By incorporating advanced identification capabilities, this feature goes beyond mere headcounting and provides demographic and age analysis, allowing retailers to gain valuable insights into customer profiles and behaviours. By accurately counting and tracking foot traffic and analysing demographic data, businesses can optimise store layouts, improve product placement, and better target promotions.

## **Person down detection and alerting**

Using machine perception and video analytics to detect a single person or people who have fallen or slipped, retailers can customise triggers and receive instant alerts so they can take immediate action.

## **Reports on trip and fall detection**

With the use of man-down alerting, Broadsecure keeps a record of areas that have repeated trips and fall incidents, giving retailers an accurate record of accident occurrences (if they are not reported by customers and/or workers).





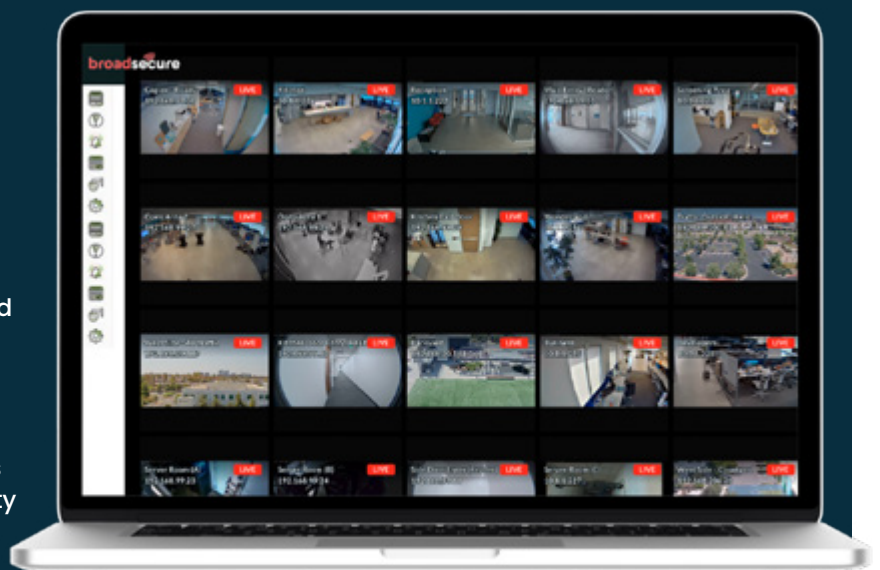
## Custom Zone Configuration: Alert Systems for Enhanced Containment and Control

Narrow down areas of interest and establish custom zones within your field of view. Collect data and set up alerts that are activated exclusively within these designated zones. Create digital map boundaries for effective containment and control and monitor how individuals navigate these areas.

## Single Dashboard with Floor Map

Broadsecure provides seamless monitoring and surveillance with our single dashboard featuring an intuitive floor map interface: easily navigate and visualise all camera locations within your premises with just a click.

Our solution integrates with existing cameras, providing hassle-free access to live video feeds for enhanced security and peace of mind.





# Petrol/Gas Stations

*Retail - Indoor store and external solutions*

## Drive-Off / Drive-Away Detection and Prevention: Real-Time License Plate Logging and Incident Footage + Driver Notification / Reminder

Specifically designed for petrol/gas stations, this technology automatically detects instances of drive-offs/drive-aways and logs license plate details with high-quality footage of the event. The solution will alert/remind the driver in real-time to ensure that they have paid as their details are captured and logged. The driver is notified that their details are being logged. (A splash pay screen can be presented to the driver for payment – as an optional 365mesh feature).

Additionally, the 365mesh solution is capable of predicting drive-aways before they happen with early warning to reduce these occurrences. Also includes real-time playback capabilities, allowing station personnel to quickly review incidents as they happen, enabling immediate action to be taken. By streamlining incident management and enhancing security protocols, this feature not only helps reduce losses but also promotes a safer environment for both customers and staff.



## Comprehensive Vehicle Identification and Counting System

Accurately capturing and recording essential details about each vehicle entering the petrol/gas station, including model, color, and type—such as ute, sedan, truck, or motorcycle. This feature not only helps with customer demographics analytics and preferences, but also enhances operational efficiency by optimising service delivery based on vehicle types. Gain insights into traffic patterns and vehicle trends and improve overall customer experience, ensuring that services align with the needs of your clientele.







## Detecting and Reporting of Dangerous Behaviour at Entrances and Exits

Detect unsafe events involving vehicles and pedestrians at entrances or exits. Identify potential hazards in real-time, such as illegal/unauthorised parking or stopping, pedestrian negligence, among others. Alerts are generated immediately, allowing staff to respond swiftly and thereby mitigating risks and ensuring a safer environment for everyone.



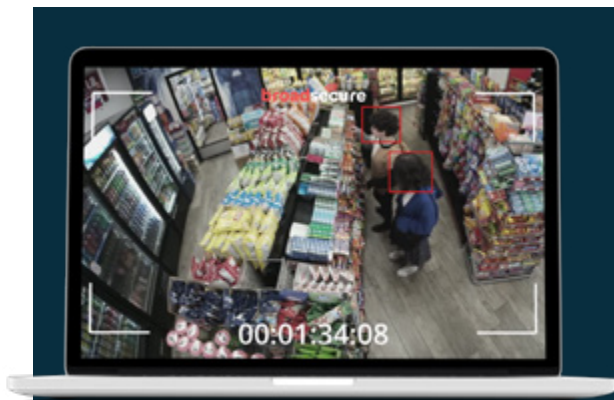
## After-Hours Monitoring for Safety Hazards

Our after-hours alert system employs a network of onsite sensors to detect critical safety hazards, such as broken glass, sounds of aggression, flooding, or running water. This proactive feature provides real-time notifications to staff, enabling swift response to potential issues that could compromise safety or cause damage. By monitoring these conditions even when the station is closed, we help ensure the security and integrity of the property.



## Enhanced In-Store Counting and Recognition for Theft Prevention

Accurately track customer movements and identify individuals within the petrol station. Utilising advanced analytics and facial recognition technology, this system provides real-time data on foot traffic counting while flagging suspicious behaviour such as stealing or unauthorised access onto the property. Our system recognises repeated offenders (or people of interest), so that retailers can implement proactive measures to improve security.

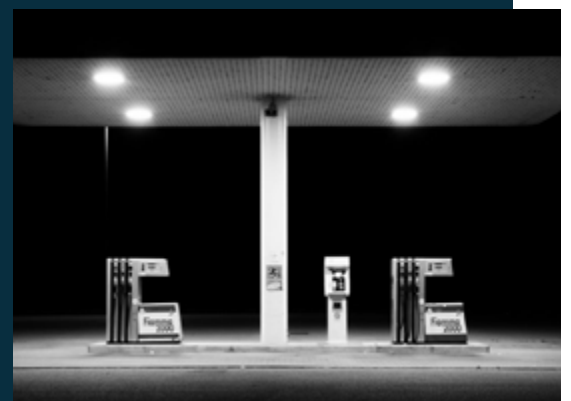


## Proactive Recognition of Persons of Interest

Our system effectively recognises persons of interest, including those with a history of non-payment drive-offs. By analysing license plate data and leveraging facial recognition technology, we can identify repeat offenders as they approach the petrol/gas station. This proactive approach allows staff to take immediate action, enhancing the overall security for the business.

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# Artificial Intelligence - Insights and Reporting



## Real-Time Insights with Multi Modal Gen AI

Specifically designed for petrol stations, this technology automatically detects instances of drive-offs and logs license plate details with high-quality footage of the event. With real-time playback capabilities, station personnel can quickly review incidents as they happen, enabling immediate action to be taken. By streamlining incident management and enhancing security protocols, this feature not only helps reduce losses but also promotes a safer environment for both customers and staff.



## Proactive Security with AI-Powered Alerts

Stay ahead of potential risks with smart AI alerts that flag abnormal activities, such as unauthorised access or suspicious behavior. With Multi Modal Gen AI, security personnel can ask follow-up questions like, "Which areas has this individual accessed today?" or "Has this vehicle been here before?" This dynamic, conversational approach allows for real-time investigation without the need for manual data review.

## Tailored Reports on Demand

Instead of sifting through complex charts or predefined templates, simply ask questions like, "How many theft incidents occurred this week?" or "What were the busiest hours yesterday?". Get specific, actionable insights in natural language, giving you the power to monitor performance and security with ease.



# IoT Sensor-Based Features



365mesh offers a range of IoT sensor-based features that can be activated as needed. Whether you need to monitor air quality, detect broken glass, or ensure optimal energy use, our system provides versatile, real-time data to help you maintain a safe and efficient environment.

## Keep track of energy and water usage

Monitor and produce reports consolidating worksites' overall electricity and water consumption per day, week, month and year (to date). This data is also available for all individual circuits and water sources. Create and manage email and SMS alerts for when certain power consumption levels are reached.



## Garden Health Monitoring and Irrigation Integration for Petrol Stations

Monitor the temperature and soil humidity of your gardens to ensure optimal health. By tracking environmental conditions, this system can trigger automated irrigation, ensuring that gardens remain vibrant and well-maintained. Integrating with irrigation systems not only conserves water but also ensures the best results with minimal manual intervention.



## Gas Bottle Monitoring

Detect the presence of toxic, asphyxiant and explosive gases such as carbon monoxide, methane, hydrogen sulfide and oxygen deficiency/enrichment around fixed and portable gas products. This also assists with workplace ventilation management.



## Comprehensive Carbon Monitoring and Air Quality Management for Indoor and Outdoor Environments

Monitors the air quality and composition of greenhouse gases in the environment, such as carbon dioxide, methane, ozone, nitrous oxide, chlorofluorocarbons, and water vapor that contribute to a carbon footprint. Reports of these emissions can be exported for carbon footprint qualification analysis and to make educated decisions to mitigate carbon emissions.

## Real-Time Fridge Monitoring

Ensure your food stays safe and your operations stay smooth with our Fridge Monitoring Sensor. This sensor provides real-time data on temperature and humidity, ensuring you meet strict food safety standards. With our system, you can remotely monitor your refrigerators, safeguarding against spoilage.



## Asset tracking

This feature tracks inventory levels in real-time, alerting you when stock is low and monitoring in-transit assets across the supply chain. Enables real-time adjustments to delivery schedules and production planning, ensuring seamless operations both indoors and during transit.



## Noise Monitoring

Monitors noise levels in petrol stations, tracking and recording real-time levels to comply with government/council limit values, regulations for environmental and comfort noise levels. It also monitors vibration performance in real time, ensuring a safer and more controlled environment.



## Smart lighting

Minimise energy wastage through the use of smart lighting. Our sensors monitor vehicle/pedestrian traffic and only turns on lights when someone walks past/up to the light – these can be dimmed to keep a low level of light until movement is detected whereupon it lights up fully.



## Broken Glass Detection


Sense audible indicators of damage, distress and aggression. This sensor uses AI/ML noise detection technology to detect and differentiate alarming audio such as glass windows breaking, gun shots, screaming, etc. Customise alerts and notifications to send alerts directly to your security team or central monitoring facility, ensuring prompt action on any safety concerns.



## Flood or water leak detection

Save water and prevent costly damage by detecting leaks through advanced audio monitoring. Our noise detection sensor alerts you to potential leaks early, helping you save money and protect your property from serious damage.





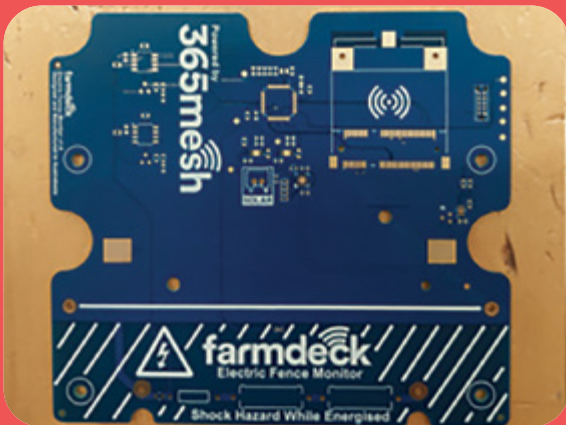
**MONITOR.  
DETECT.  
ANALYSE.  
AUTOMATE.**

# Designed & Manufactured in Australia & New Zealand

Aimed at withstanding local weather conditions in snow, high heat and extreme wind environments.

## Locally manufactured in Australia for fast shipping and local support

- › Rapid prototyping
- › Injection moulding
- › Assembly and shipping
- › Electronics PCB
- › Hardware testing
- › Manufactured by experienced engineers



Ongoing maintenance with local in country support hosting network monitoring centres in Sydney and Melbourne

# 24 x 7 x 365days

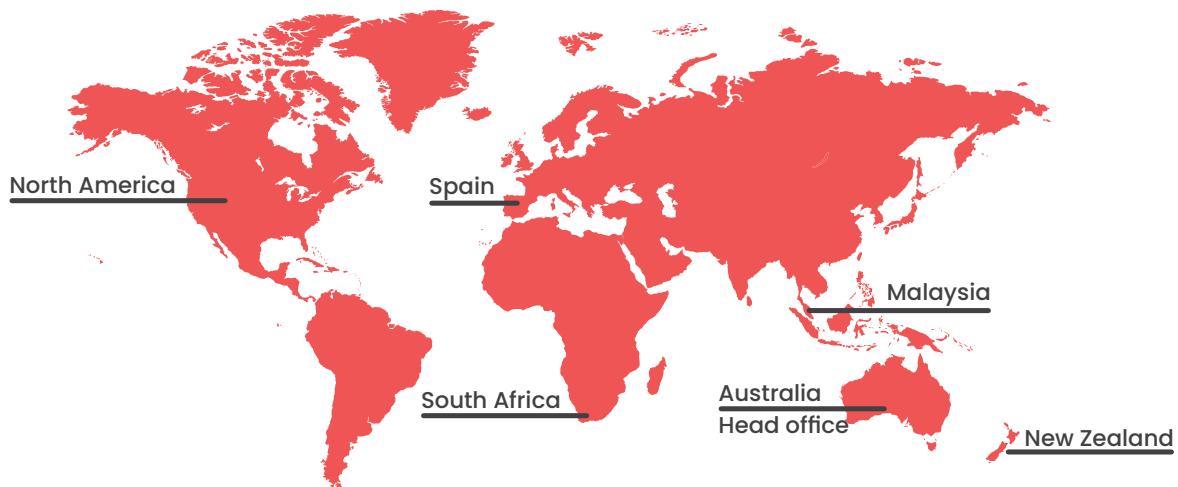


# Gain real time visibility over your retail operations and petrol stations with 365mesh IoT portal.



## WE ARE FOUND GLOBALLY

Australian based, owned & operated with local manufacturing capabilities



## Contact us

Follow us on social media

**@365mesh**

## Join our Reseller Program

**Direct customer enquiries welcome**  
or alternatively, we will introduce you to  
a relevant skilled 365mesh integration  
partner in your region.