Revolutionising Transportation and Logistics: IoT Solutions for Fleet Operators

Empower your fleet, drive your success. Connected, smart, secure.

Fleet management is the backbone of many businesses, connecting vehicles, drivers, and logistics operations. Ensuring optimal performance and safety is now easier due to the power of IoT telematics solutions. Our IoT telematics and fleet management solution offers a comprehensive approach to managing fleets, providing real-time insights and actionable data for enhanced operational efficiency.

Using our intuitive dashboard, fleet managers can make informed decisions on the go, responding quickly to changing conditions and emergencies. Our platform is built on the principles of reliability, scalability, and security, ensuring your data is protected while providing the flexibility to grow with your fleet.
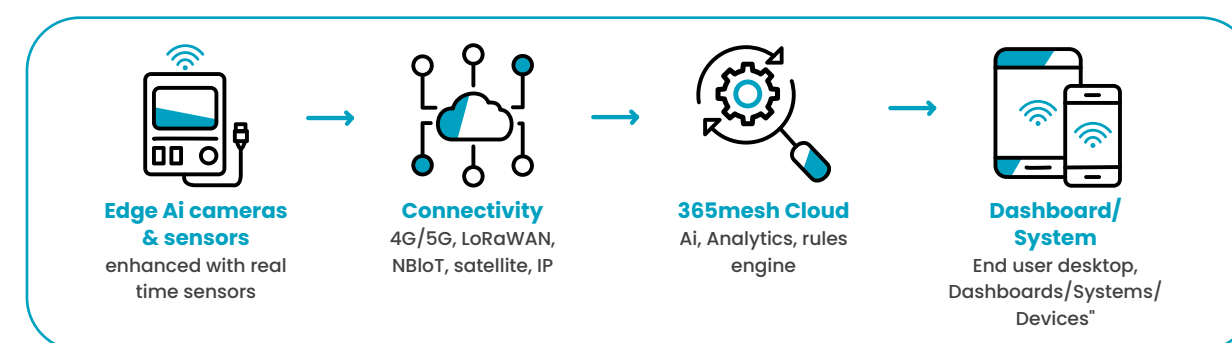
Our team of experts will work with you to install and configure sensors and devices, ensuring seamless integration with your existing fleet infrastructure.

Through data analytics, recommendations can be given for:

› More energy-efficient routes;

› Helping to reduce fuel consumption;

› Lowering carbon emissions;

› Managing driver's training;

› And a host of other features engineered to streamline your fleet management processes.

By leveraging sensors, devices, and connectivity, our solution enables businesses to optimise fleet performance and improve overall productivity.

Secure end-to-end IoT solutions with advanced artificial intelligence capabilities

Edge Ai cameras & sensors
enhanced with real time sensors

Connectivity
4G/5G, LoRaWAN, NBIoT, satellite, IP

365mesh Cloud
Ai, Analytics, rules engine

Dashboard/ System
End user desktop, Dashboards/Systems/ Devices"

Anywhere, Anytime Connectivity

› Ethernet
› LoRa
› Wifi
› Satellite

Managed Services Provider operating

24x7

NOC (Network Operations Centre) in Sydney and Melbournerne.

100% coverage

of earths land and water surface areas

The all-in-one Telematics solution

The Telematics and Fleet Management solution delivers not only vehicle operations optimisation but resolves a range of other challenges when it comes to managing resources. From monitoring assets health and tracking usage patterns to predicting maintenance needs.

Track the live location of your fleet

Using 4G LTE technology, maintain real-time GPS tracking on all moving vehicles. See live and historical detailed data through our user-friendly interface with location updates every second. Customise the retained data according to your needs and/or policies and share information effortlessly.
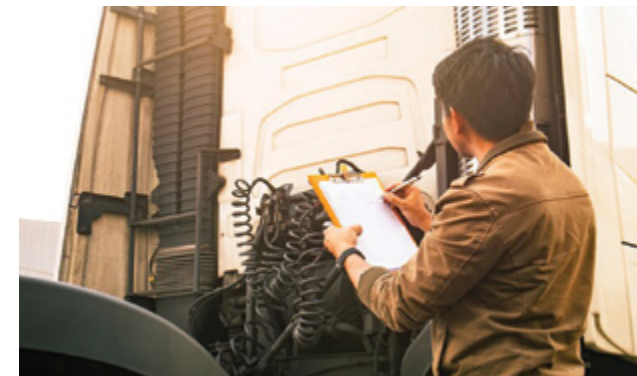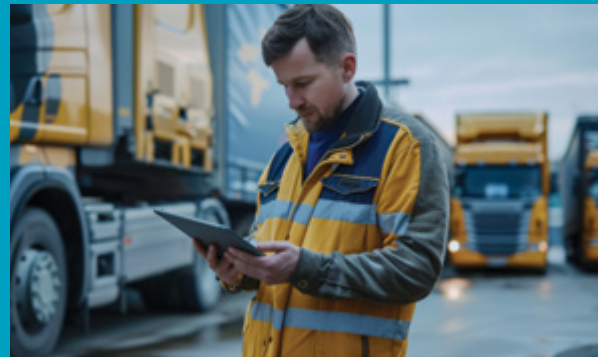
Receive diagnostics reporting of vehicles health and usage remotely

Gain awareness of vehicle's health and usage with our real time diagnosis reporting and receive alerts every time a fault code is detected. Pinpoint issues before they arise, preventing malfunctioning, reducing costly downtime and improving drivers' safety.

Detect crashes and monitor driver's behaviour

Utilising advanced sensors, our system swiftly detects and reports instances of harsh braking, crashes and high-g-force events. Gain visibility, manage training, enhance safety measures and boost driver's performance using the data provided for a thorough evaluation.

The 365mesh telematics solution also has the ability to place a camera within the driver's cab that is used to monitor's the driver's behaviour for various behaviours such as tiredness, falling asleep and other behaviours that could lead to unsafe driving conditions, upon detection of any of these, an audio & visual alert is sent to the driver to assist them in staying awake or more alert, reminders to take a break etc.
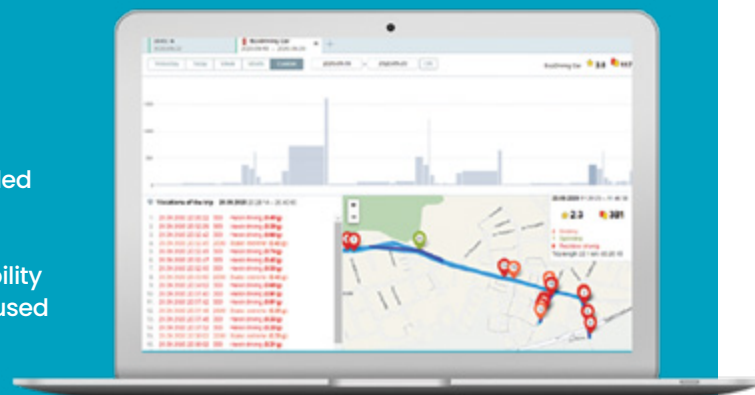
Group your assets and manage their movements

Our Geo-fencing and Asset Grouping feature tracks and provides the location of vehicles, machinery and inventory in real-time. More than that, our sophisticated geo-fencing capabilities allow users to customise and enable alerts via SMS and e-mail for movements outside or inside a geofenced zone. Customise your solution to the fullest by making use of our ability to dynamically group assets within the 365mesh software.

All in one platform

Control your operations and manage your data on one centralised view, making it easier to configure, update, and troubleshoot. Our centralised platform can be used as a control and visualisation platform for both vehicle operators and operations personnel. The platform can be accessed through any web browser-enabled devices.

Monitor and record refrigerated trucks and cold rooms

Measure the operating temperature and humidity for each refrigerated truck and detect when maintenance may be required for your cold rooms and freezers, to prevent health hazards. Streamline record-keeping with a comprehensive logbook of collected data, aiding compliance with health and safety standards while minimizing manual efforts.

Fuel Usage and Economy Analysis

Gain comprehensive insights into fuel usage and economy tracking, crucial for environmental reporting and optimising fuel consumption. Customise sensor settings to receive alerts for high emissions detection or unusual fuel consumption patterns, empowering you to proactively manage and address potential issues.

Anti-theft and Tamper Proof

Rest assure with our advance anti-theft and tamper-proof mechanisms. In the event of any tampering or attempt, immediate alerts are triggered and promptly dispatched to administrators via email and SMS, enabling swift intervention.

Duress Alarm System

Our robust duress alarm system, with multiple notification options, provides an extra layer of security for drivers and ensures prompt action in emergency situations. With the press of a button, drivers can instantly alert dispatchers of potential threats or emergencies, enabling swift response and assistance.

Collision detection and avoidance

Detect potential incidents between pedestrians and moving vehicles or between two vehicles in depots, garages, gas stations and other environments. The installation of strategically placed blind-spot detection and driver monitoring cameras onto vehicles gives drivers real-time warnings of hazardous collision risks. These sensors detect when a moving person or vehicles are in a potential path of collision and advises of smart precautions.

Driver Behaviour Monitoring and Alerting

Leveraging Broadsecure AI technology (learn more below), this feature ensures the safety and well-being of your drivers. By installing or utilising existing in-cab cameras, we monitor the driver's face and eyes to detect and determine if they are distressed or fatigued. With customisable capabilities, our system can sound an audio alarm to alert the driver if, for example, he falls asleep.
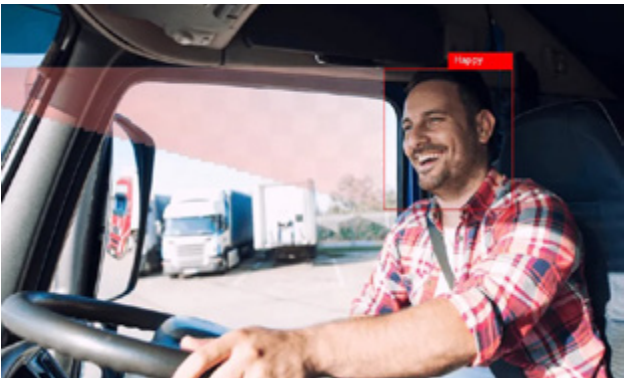
Pre-start Check and Daily Reports

Take control with our fully customisable reporting. Whenever a driver ignites the engine, all sensors start transmitting their data to the 365mesh Telematics server. This enables you to create detailed pre-start checks or daily reports on vehicle diagnostics. Our platform offers flexible configurations tailored to your requirements, such as receiving an alert, should any anomalies be detected in the pre-start check.

Monitor. Analyse. Streamline. Automate.

Seatbelt Monitoring
Receive and manage alerts for non-compliance for vehicles where CAN reading is available
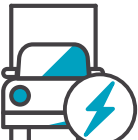
Electric Vehicle Compatibility
Compatible for installation and usage with EV vehicles and able to read factory parameters in selected devices

Safe Distance Monitoring and Alerting
Produce an alert triggering detection zone around machines and restricted areas

Vehicle Counting in depots
Keep counting records in your depot and differentiate between vehicles, including cars, buses, trucks and more

Historical Trip Data
Customise data retention and analyse detailed trip data, including distance, speed, stops, and idling times.

User access and permissions control
Manage user access and permissions to data and dashboards based on customisable assigned levels

Small Plant Items Telematics
Receive the location of small plant equipment 1-2 times a day and get live tracking in the event of a theft recovery

Hour meter, idling and ignition readings
Record and report on hour meter readings, idling and operational times, with specific features for different types of fleet vehicles

Usage Alerts Outside of Operating Hours

The 365 mesh platform empowers you with configurable alerts to monitor asset usage outside of designated times. In addition, gain the ability to customise operational schedules to remotely disable vehicles during non working hours and re-enable them during working hours, enhancing security and compliance with operational policies.

Vehicle and external surroundings safety & security solution

Add another layer of protection and safety for vehicles and pedestrians by providing a comprehensive surveillance coverage of its surroundings. Leveraging the advanced capabilities of our Broadsecure technology and the smartMX-180 Camera, this solution consists of the installation of multiple (3-6) cameras and provides drivers with real-time visibility and advanced security features, aiding in the prevention of accidents.

Broadsecure is an intelligent end-to-end cloud-based video surveillance solution developed by 365mesh that utilises advanced AI/ML technology to detect and identify a wealth of objects and movements with extremely high levels of accuracy through processing live video footage imagery and data collection features for analysis. Our cutting-edge intelligent detection directional pan, tilt, and zoom capabilities elevate real-time camera monitoring to new heights. (see next page for all features).

Surrounding Surveillance
➔ **Multi-camera Setup:** Equip your vehicle with three to six cameras, providing a 360-degree view of its surroundings. This ensures no blind spots and enhances the driver's situational awareness.
➔ **Real-time Monitoring:** Drivers can view live feeds from all cameras, allowing them to make informed decisions on the road.
➔ **Gain visibility while on the move:** Our dashboards require low touch user interaction ensuring that drivers can comprehend the information without the need to touch the screen.

Broadsecure Security Features
➔ **Collision Avoidance:** Cameras continuously monitor for potential obstacles, providing timely warnings to prevent collisions.
➔ **AI-powered Analytics:** Utilises Broadsecure's AI capabilities to analyse camera feeds in real-time. This includes detecting pedestrians or animals on the vehicle's path.
➔ **Automated Alerts:** Receive instant notifications (customisable) for any detected incidents, ensuring prompt action.

Data Storage and Retrieval
➔ **Cloud Storage:** Securely store video footage in the cloud, allowing for easy access and retrieval when needed.
➔ **Historical Data Analysis:** Analyse past footage to identify patterns and improve security measure.

Scalable
➔ **Expandable System:** Easily add more cameras or integrate additional security features as your needs grow.

SmartMX-180 Camera
The smartMX-180 camera offers top-tier image streaming with clear videos and snapshots at up to 30 frames per second. These durable truck cameras enhance driver visibility, significantly reducing the likelihood of incidents and promoting safer work environments.

➔ Provides full coverage with a 180° horizontal and 160° vertical field of view;
➔ Features on-board image processing and video streaming for rapid data collection and analysis;
➔ Each camera can independently process its surroundings, ensuring early risk detection;
➔ Withstands high-pressure washdowns (IP69K), severe vibrations, and operates in extreme temperatures (from -40°C to +65°C).

Broadsecure Use Cases

Intelligent, cloud based video surveillance solution
With advanced AI/ML capabilities

Compatible with users' existing cameras
No need to replace cameras

Single dashboard with floor MAP
Shows all camera locations with one-click access to live video feeds

Streaming back-up to cloud
Multiple storage durations for footage: 30, 60, 90,120, 180 Days (custom)

Image Detection and Identification
Advanced AI/ML capabilities to accurately process and detect items off footage

Object Identification
AI capabilities to accurately identify objects

Animal Identification
AI capabilities to accurately identify species of animals

Identify and classify by people demographics
AL capabilities to identify age, gender, colour and type of clothing

Identify only people of interest
Protect the privacy of people outside the watch list with a no biometric data saving enabling option

Behavioural analysis capabilities
Manage and analyse people's behaviours to optimise standard operating procedures

Allow Motion Search
Search and filter through a library of motions within specific area of interest in the video stream. Set an alert for any activity within a particular area of interests.

Face Search with integration into AD
Pull up a library of faces detected and select one to see all the times and dates of when they were identified in footage

Motion heat maps
View the way people or objects move around areas, including Push events/triggers

Person tracking based on facial or electronic tag Utilise tags and facial
Recognition to implement site safety monitoring and automate time attendance

Create custom zones
Narrow down areas of interest on a field of view. Collect data and set up alerts that occur only within this zone

Create virtual fences and boundaries
Create landscape boundaries on a digital map and contain people/animals using tags

History View
View the history of data collected which updates every hour, up to 120 days

ONVIF compliant
Remotely control the cameras' zoom, focus etc

Real time camera surveillance
With intelligent detection directional pan, tilt and zoom capabilities

Share access
Send incident alerts to anyone via sms and email

Workplace Safety

Detect workplace incidents and alert before they happen
Identify potential problems quickly and isolate recurring problems

Machinery safe distance monitoring and alerting
Produce an alert triggering detection zone around machines and restricted areas

Man down detection and alerting
Instantly trigger alerts so immediate action can be taken

Collision detection and avoidance
Install blind spot detection cameras, giving drivers real-time warnings of collision risks

Workplace machinery exclusion zone monitoring and detection
Keep unauthorised personnel safe and distant from caution zones

PPE monitoring, detection and identification
Identify PPE and deny workers from entering job sites if all the safety wear required is not detected

Pedestrian vehicle/machinery accident detection
Reduce the risk of vehicle-pedestrian collisions in busy workspaces

Realtime electronic tags for unique identification
Utilise tags to implement site safety monitoring around exclusion zones

Your security is our priority.

Data collected from the sensors is owned by the customer and data is stored locally on customer premises with optional backup in the cloud.

Locally manufactured in Australia for fast shipping and local support

- › Rapid prototyping
- › Injection moulding
- › Assembly and shipping

- › Electronics PCB
- › Hardware testing
- › Manufactured by experiences engineers

Managed Services Provider operating

24x7x365 days

NOC (Network Operations Centre) in Sydney and Melbourne.

MONITOR.
ANALYSE.
STREAMLINE.
AUTOMATE.