
POWERED BY
365mesh
smart citydeck
Metropolitan, Rural, Recreation, Public Spaces and Park Areas
All in one IoT Solution with rich analytics for end-to-end application across local government councils (departments, outbuildings and assets)

# IoT solutions for councils and communities

## Smart cities, thriving communities. Connected, efficient, sustainable.

Public spaces and amenities are the connection points between cities, councils, and communities. To manage local wellbeing, councils need to meet rising expectations for safe, clean, and convenient experiences. Smart CityDeck is an end-to-end Internet of Things (IoT) solution designed for cities, councils, and other locations open to the public. With sensors and devices, network and connectivity, data processing, and a user application, Smart CityDeck is a complete IoT solution.

Using the Smart CityDeck app, councils can make educated real-time decisions to immediately respond to issues and maintain assets efficiently, while collecting data to provide information for long term planning, including capacity and usage information.

Our team of engineers and IoT specialists install sensors and cameras at your locations so you can start collecting data quickly. All our features are presented centrally on a user-friendly dashboard and can be accessed remotely via a web browser. Smart CityDeck gives you the possibility to configure alerts and notifications, as well as reports for each feature.

## 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

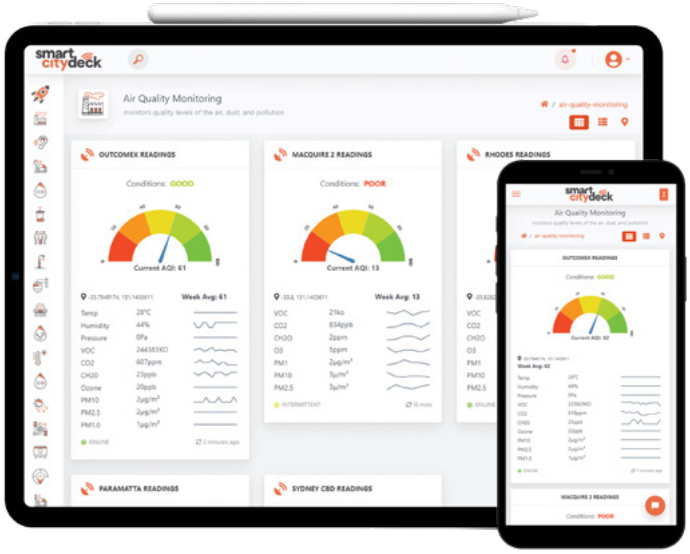
End user desktop,
Dashboards/Systems/Devices"

## Walk the walk

Through sensors integrated in pavement/ roads, customers will be able to gain real-time updates on traffic flow. This can aid councils and governments to adjust traffic and pedestrian lights where traffic is heavy to help alleviate the flow. Traffic trends such as peak hour traffic times can also be established by the data derived from these sensors used to help create a solution to ease congestion. With the same sensors, pedestrian counting can be monitored. This will assist councils when assessing if amenities need to be relooked at – if bathrooms need to be cleaned more often, if playgrounds need more maintenance, etc.

## Real-time environment monitoring

Through sensors installed in public spaces, councils can monitor air conditions and current air quality index rating, temperature, as well as the noise level (decibels) in certain areas. Through this, new zones can be introduced to lower these levels in the city. Monitoring indoor air quality (IAQ) in public and government buildings can alert staff of unsafe pollutant levels to ensure the safety of the public.




## Sustainable cities

Minimise energy wastage through the use of smart lighting. Our sensors monitor pedestrian traffic and light up or dim lights accordingly to when someone walks into the vicinity – lights are dimmed to keep a low level of light until movement is detected whereupon it lights up fully. This tracking will reduce the need of electrical power and save on costings.

# The all-in-one IoT solution

**Maximise technology and utilise IoT to make the quality of life within cities and day-to-day activities simpler, easier, and more effective.**

### Crowd Detection and Alerting
Count people in large event spaces, track queue lenghts and movement to estimate waiting times and manage capacity.

### Digital Twins (Interactive & Real-time)
Virtually gain visibility of a physical space or object with accurate data collection, environment simulations and educated predictions.

### Traffic Flow Monitoring
Count vehicles and people in key locations during peak/off peak times and detect traffic congestion.

### BBQ
Track public BBQ usage and availability via the council website and public dashboards and signage.

### Security
Count and monitor how many people are using the space during certain times.

### Waste Management in Rubbish Bins
Tracks litter level in bins and receive alerts when bins reach a specific level or are full.

### Measurement of Soil, Moisture and Irrigation
Measure the moisture of sport grounds or parks and turn irrigation on and off automatically when necessary

### Hazard Gases Detection
Detect gas levels and leakages in councils and public environments.

### Illegal Dumping and Monitoring
Monitor waste sites and detect unauthorised dumping in private and public properties.

### Sun Untraviolet Radiation
Detect UV radiation levels at beaches or similar public locations and display them onto information kiosks and signage to advise safety level.

### Temperature Monitoring
Monitor temperature of indoor/ outdoor, fridges and similar, with real-time alerting and reporting.

### Asset Tracking
Manage indoor and outdoor asset and location advice (vehicles, machinery, inventory).

### Forest Fire Detection
Monitor smoke and other combustion gases and detect preemptive fire conditions.

### Smart Parking
Monitor individual car park availability and usage. Understand occupancy and trends.

### Information Kiosks and Digital Signage
Delivers content from council like advertising, information services and weather or road notifications.

# Ensure sustainable water for your community

## Water Management

Accurately measure the amount of water being stored and used in water tanks and bubblers at parks and similar locations. Ensure efficient water usage and management in community spaces.

## Water Meter Monitoring

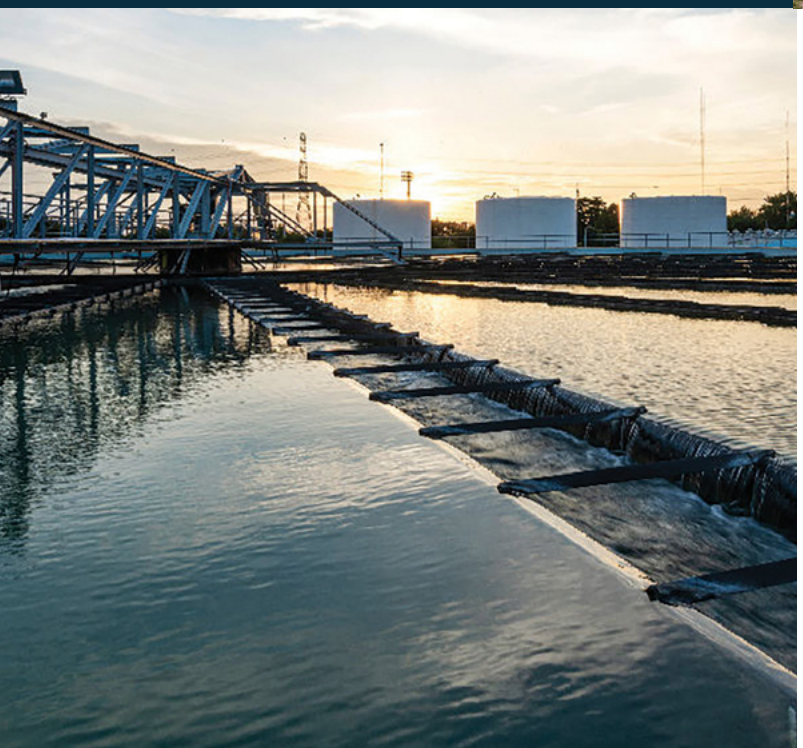
Monitor water meters with automated remote readings across residences and businesses. Receive real-time data on water usage, reducing the need for council staff to conduct physical inspections.

## Water Meter Reading and Monitoring (remotely)

Continuously monitor water conditions such as algae in lakes, dams, and estuaries and perform timely remediation.

## Water Quality Monitoring

Track and analyse water quality in rivers, ponds, tanks, and wildlife areas, including camping sites. Ensure safe and clean water for both wildlife and recreational use.

## Water Levels

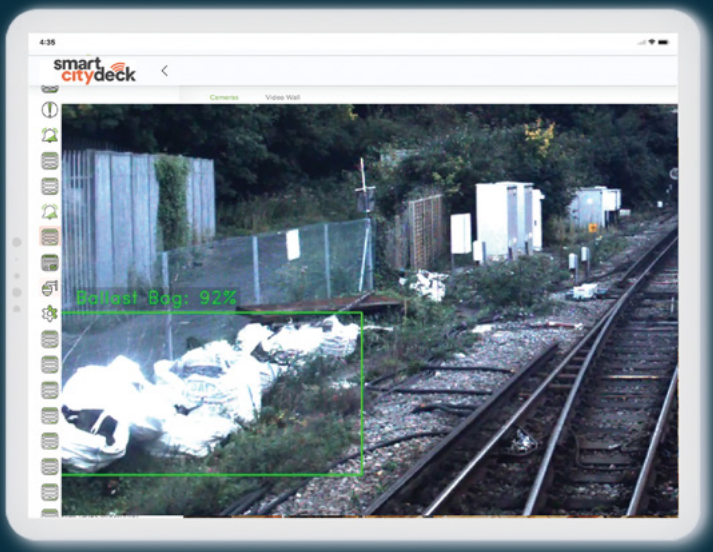
Monitor water and liquid levels in lakes, ponds, and tanks. Detect leaks early with advanced leakage detection capabilities, ensuring optimal watermanagement.

## Water Chemicals Monitoring

Regularly monitor chemical levels, such as chlorine, in public swimming pools and similar locations. Ensure public safety and maintain proper chemical balance for healthy swimming environments.

## Combat illegal dumping

Using advanced technology to assist Councils, we discreetly mount 360- degree cameras in moving vehicles (such as bin collection trucks) or around known dumping hotspots. These cameras detect illegally disposed items and activities (even in low light and poor visibility) and collect custom information such as vehicle number plates. Trained with AI and ML, our solution aims to help councils detect and identify illegal dumping and to act accordingly with the data and video evidence collected.




## Detect litter for enhanced safety

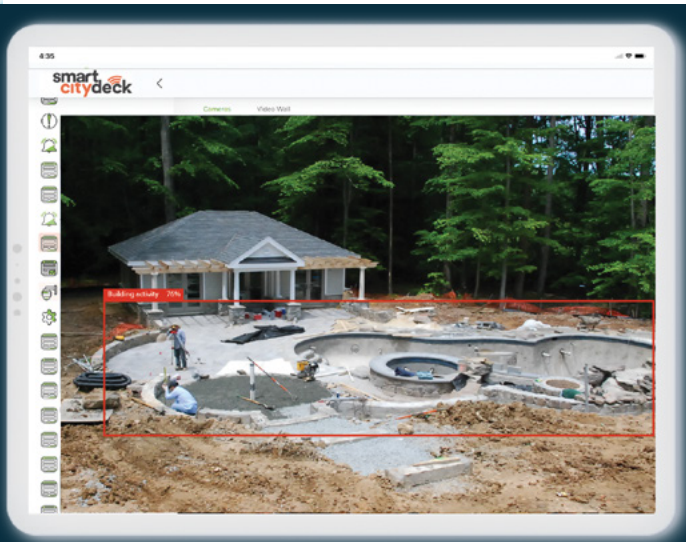
Detect litter and dumping on the side of footpaths, roads and tracks such as abandoned trolleys, mattresses and other items that could create safety obstructions in roads and railways and alert the maintenance/ operational teams.

## Keep track of utility monitoring

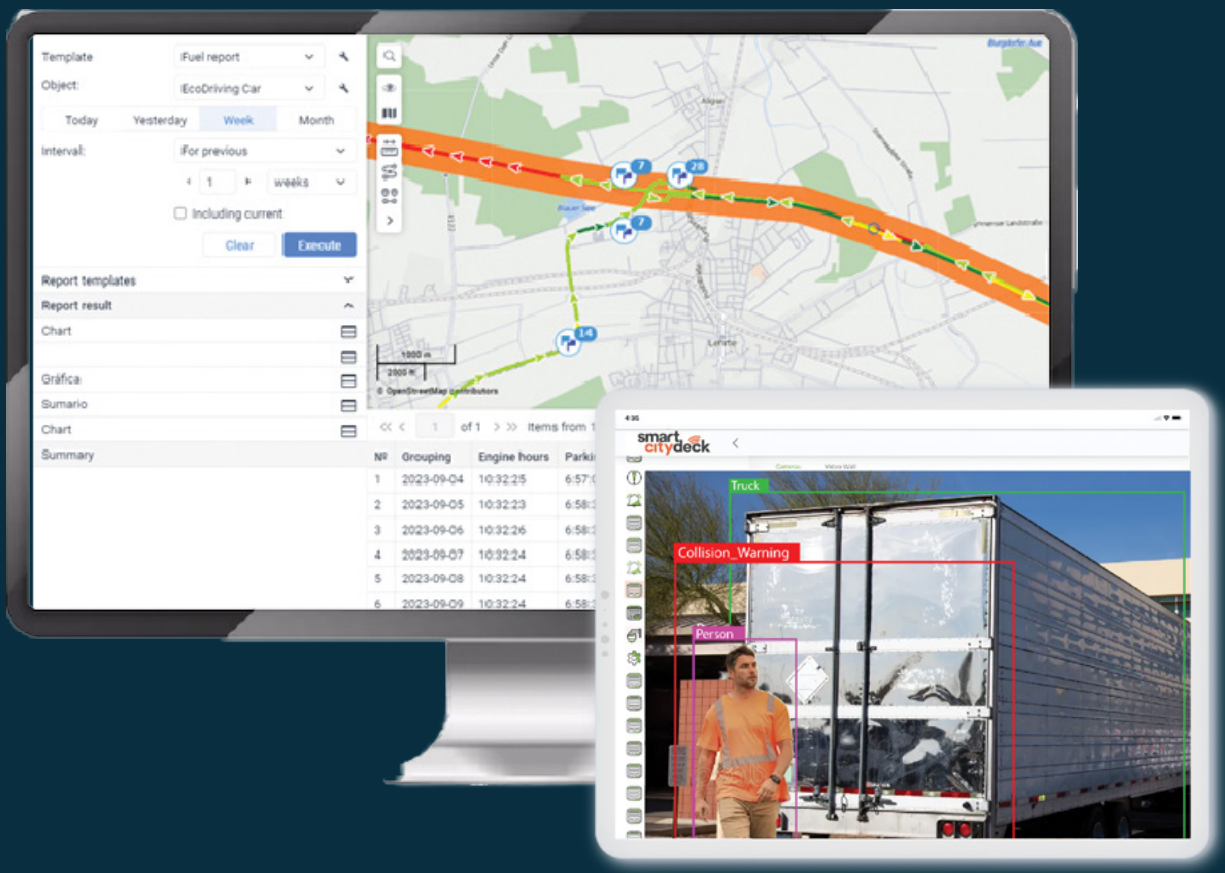
Smart CityDeck offers automated remote readings for comprehensive utility monitoring. Track electrical meters across residents and businesses in real-time, whether as individual units or as part of a whole system. This solution significantly reduces the need for council staff to perform manual meter inspections, enhancing efficiency and accuracy in utility management.

## Have visibility over unauthorised building activity

Effortlessly monitor extensive areas, from large territories to entire states, for unauthorised building activity. Our Smart CityDeck technology performs daily, weekly, or monthly scans of maps, detecting any changes and promptly reporting building activities to the council.



# 365mesh Telematics and Fleet Management Solution




## Vehicle and Asset Tracking:

Using 4G LTE technology, maintain realtime GPS tracking on all council vehicles and other mechanical and maintenance assets (such as trailers, generators etc).

## 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.

## Fleet Management:

See live and historical rich trip and vehicle data through our user-friendly interface with updates every second.

## Driver behaviour:

Detect and report instances of harsh braking crashes and monitors driver's behaviour such as tiredness, falling asleep and other behaviours that could lead to unsafe driving conditions.

## Collision detection and avoidance:

The installation of strategically placed blind-spot detection and driver monitoring cameras onto vehicles gives drivers real-time warnings of hazardous collision risks.

## Rollover Detection and Alerts:

Provides rollover detection and realtime alerting.


# Aether Sensor

## Senses and detects:

- **Air quality and atmospheric contaminants**
- **Room presence/occupancy**
- **Audible indicators of aggression, distress, damage**
- **Theft detection - breaking glass**
- **Ambient temperature, humidity, pressure**
- **People counting**

All while remaining secure against physical and digital exploits

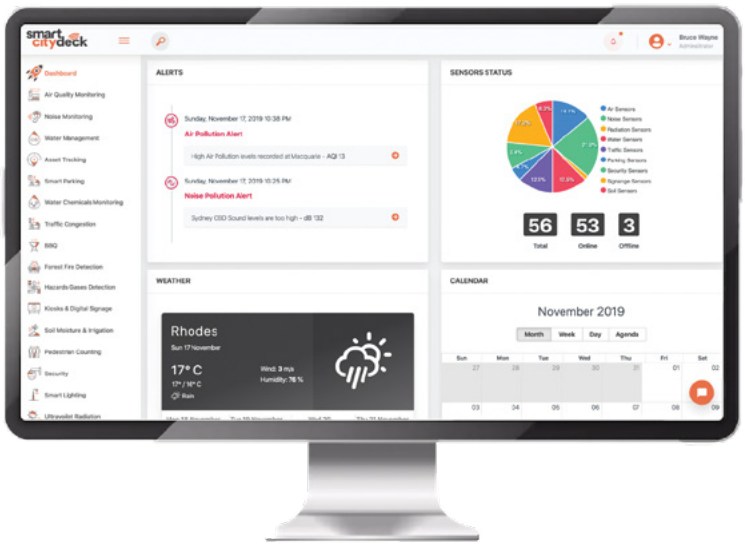
Managed with cloud and browser-based dashboards so you can view alerts and data anywhere and at any time, by multiple teams.

## Receive alerts on Air Quality and Atmospheric Contaminants

Monitor and create custom alerts for ambient temperature, humidity, pressure and more than 12 hazardous gases. Identify gas signatures for vaping, THC smoking, tobacco, methane, among others.

## Multi-sensing

The Aether sensor excels at differentiating between gases, including distinguishing tobacco smoke from marijuana, and more; and it's engineered to alert when it detects an attempt to mask smoke, such as aerosol sprays.



## Sense audible indicators of aggression, distress and damage

Uses AI/ML noise detection technology to detect and differentiate alarming audio such as glass windows breaking, gun shots, screaming, etc, and send alerts for a prompt action.

## Anti-theft / Anti-tamper proof

The Aether sensor alerts if tampered with and utilises a backup battery to maintain monitoring functionality even when unplugged or during power outages.


## Measure overall noise levels

Monitor noise levels in public spaces and pair this feature with our video surveillance features for identification of the route cause.

## Detect quality and level of light in a room

Create custom alerts for your security teams if lights are left on overnight or automatically switch off.

## Leakage detection

When installed at park outbuildings or bathroom amenities, the Aether sensor can detect and alert if water has been left turned on or if there's a leakage happening.

# Video surveillance can monitor how people use facilities and understand when and where there are any risks of harm.

With minimal disruption, a surveillance capability can improve safety, deter crime, and reduce risk.

# 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 backup to cloud**
Multiple storage durations for footage: 30, 60, 90,120, 180 Days (custom)

**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

**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

**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

# Advanced Analytics for Security and Theft Detection


**24x7 Cloud** based advanced surveillance with rich analytics to monitor council assets, depots, parks, campsites and other locations such as remote bathroom amenities.

**Close monitoring** after hours for theft or activity around council buildings and other selected assets.

**Besides video surveillance,** our solution uses audible detection of glass breaking or similar noises.

**Customise** unauthorised zones and receive alerts when intruders or animals are detected.

# Use Cases

## 1. Community Safety & Law Enforcement

Our Mobile CCTV and Video Surveillance System enhances community safety and support law enforcement outcomes. Through intelligent, rapidly deployable surveillance capabilities, the solution enables proactive deterrence of unlawful behaviour while providing high-quality, legally compliant evidence to support investigations. By combining AI-driven analytics, license plate recognition and high-performance imaging, cities can address priority concerns, such as hoon driving, illegal dumping and anti-social behaviour, with greater accuracy and operational efficiency.

### Hoon Driving Detection & Speed Enforcement

- Detection of high-speed vehicles (up to 200 km/h)
- Multi-lane speed monitoring
- Direction detection
- Automatic License Plate Recognition (ALPR/ ANPR)
- Radar-video fusion for improved accuracy
- Evidence capture for investigations

### Illegal Dumping Surveillance

- Monitoring dumping hotspots
- Event-driven recording (motion-triggered)
- Zone-based alerts
- High-resolution forensic capture
- Covert or overt deployment options
- Rapid relocation to emerging dumping areas

### Anti-Social Behaviour Monitoring

- Public space surveillance
- AI-based behaviour recognition
- Real-time alerts
- Motion heatmaps to identify activity patterns
- Advanced footage search for investigations

## 2. Traffic & Transport

Effective traffic monitoring plays an important role in improving road safety and supporting a city's ability to respond to issues, such as hoon driving and unsafe vehicle behaviour. Technologies such as vehicle detection, speed monitoring and automatic license plate recognition enable authorities to identify and track vehicles across multiple lanes and road environments. When combined with radar-video fusion and AI-powered analytics, these capabilities allow for accurate measurement of vehicle speed and direction, as well as reliable capture of licence plate data in real time. This provides high-quality evidence to support enforcement and investigations, while also helping the City better understand traffic activity in key areas and respond more effectively to community safety concerns.

### Traffic Monitoring & Smart City Initiatives

- License plate capture 24/7
- Traffic flow monitoring
- Multi-lane vehicle detection
- Speed monitoring and enforcement
- Data collection for traffic management planning

## 3. Public Safety & Incident Response

Rapid incident detection and timely response are essential to maintaining public confidence and safety. The Broadsecure platform enables real-time monitoring, event-driven alerts and secure evidence capture, ensuring that incidents are identified quickly and managed effectively. With cloud-based access, advanced search capabilities and extended retention policies, Council personnel can efficiently review, retrieve and share footage while maintaining compliance with relevant legislation and cyber security standards.

### Real-Time Remote Surveillance

- Live camera monitoring
- Real-time incident alerts
- Remote access via cloud platform
- Rapid deployment to emerging risk areas

### Event-Based Recording & Incident Review

- Motion-triggered recording
- Time-lapse recording
- Reduced storage and bandwidth consumption
- Fast evidence retrieval using advanced search

### Investigations & Evidence Management

- High-quality day/night imaging with IR
- Secure Australian-hosted cloud storage
- Retention exceeding 45 days
- Compliance with Surveillance Devices Act
- AI-assisted search and tracking of people, vehicles, and objects

# 4. Environmental & Infrastructure Monitoring

Protecting public spaces, infrastructure and environmental assets requires surveillance systems that can operate reliably across a wide range of locations and conditions. Cameras used for these purposes must be durable, weatherproof and resistant to vandalism to ensure consistent performance in outdoor environments. Flexible deployment options allow cameras to be installed either as fixed infrastructure or relocated as operational needs change. In addition, multiple power options such as solar, battery and mains supply enable monitoring in both urban and remote areas, including locations where traditional power sources may not be available. This flexibility ensures continuous and reliable surveillance regardless of environmental or site constraints

## Environmental Surveillance

- Monitoring public areas and infrastructure
- Weatherproof and vandal-resistant deployment
- Off-grid capability (solar/battery)

## Monitoring Key Infrastructure

- Fixed and mobile camera deployments
- PTZ and panoramic monitoring
- Edge AI processing in low-connectivity areas

# 5. Operational & Deployment

Flexibility and rapid deployment are important for responding to changing operational needs across a city. Surveillance systems that can be easily relocated or installed in different environments allow Council to address emerging issues and monitor priority areas more effectively. Mobile trailers, relocatable units and adaptable mounting options enable cameras to be positioned where they are most needed, whether for temporary events, construction sites, emerging hotspots or ongoing monitoring of infrastructure and public spaces. These deployments can be established quickly and supported through remote monitoring, diagnostics and maintenance capabilities, helping ensure reliable operation and minimise downtime.

## Rapid Deployment / Temporary Surveillance

- Mobile CCTV trailers - Deployment at:
  - **Events**
  - **Construction sites**
  - **Traffic monitoring points**
  - **Temporary high-risk areas**
  - **Quick relocation capability**
  - **Minimal setup time**

## Overt & Covert Surveillance Operations

- Flexible mounting options
- Custom brackets and enclosures
- Integration with existing infrastructure

## Remote Asset Monitoring & Maintenance

- Remote health diagnostics
- Proactive maintenance alerts
- Edge computing for recording continuity

# 6. Advanced AI & Analytics

AI-powered analytics enable surveillance systems to do more than simply record video by turning captured footage into useful operational insights. Capabilities such as object detection, behaviour analysis, motion heatmapping and license plate recognition allow the system to identify relevant events and activities more accurately, reducing false alerts while improving the quality of evidence available for investigation. In addition, edge computing allows much of this analysis to occur directly on the camera or local device, which is particularly valuable in locations with limited connectivity. Processing data at the source reduces bandwidth usage, supports continuous recording and improves overall system efficiency.

## AI-Based Object & Behaviour Recognition

- ➔ Person detection
- ➔ Vehicle detection
- ➔ Object tracking
- ➔ Behaviour analysis

## License Plate Recognition (ALPR)

- ➔ Automated number plate capture
- ➔ Traffic and enforcement integration

## PPE Compliance Detection

- ➔ Monitoring safety compliance (where applicable)

## Motion Heatmaps

- ➔ Identify high-activity areas
- ➔ Support planning and deployment optimisation

# 7. Smart City & Future Expansion

The Smart CityDeck platform is designed to provide a city with a flexible and reliable video surveillance system that can meet current needs while also supporting future technology initiatives. It can connect with existing cameras and infrastructure and is compatible with widely used industry standards, allowing the City to expand or upgrade the system over time without needing to replace everything. Since the platform is cloud-based and scalable, additional cameras, analytics capabilities and monitoring locations can be added as requirements change. This approach allows the City to gradually build and enhance its surveillance capabilities while protecting its long-term investment.

**Scalable deployments**
**aligned with budget**

**Integration**
**with existing ONVIF cameras**

**Smart city data**
**integration potential**

**Support for future**
**IoT expansion**

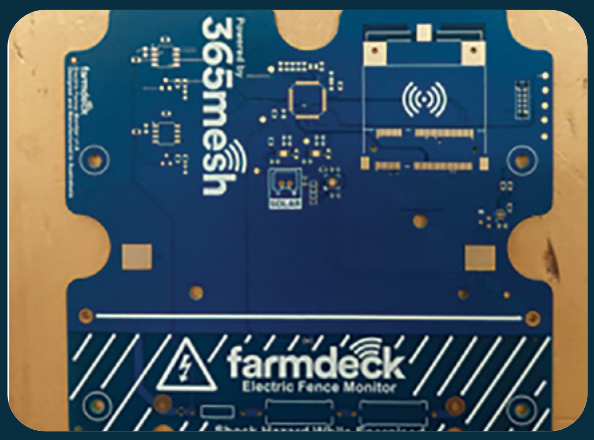
# Your security is our priority.

**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



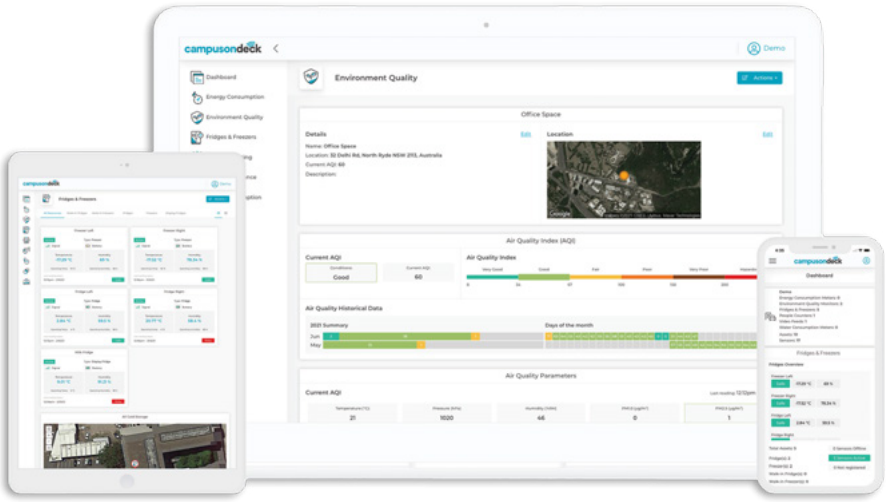
**Managed Services Provider operating**

**24x7**

**NOC (Network Operations Centre) in Sydney and Melbourne.**

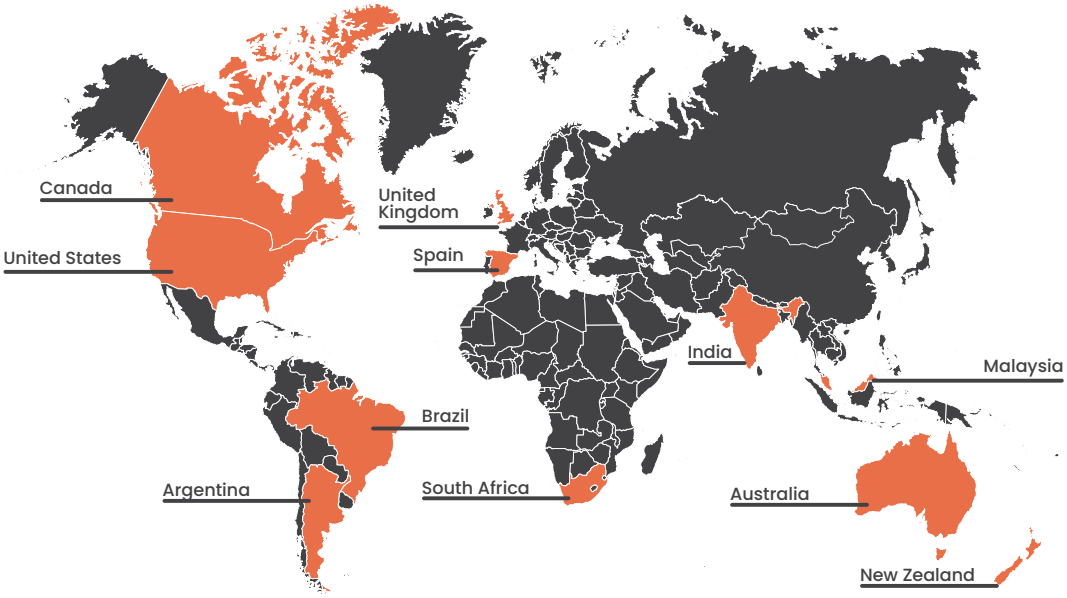

MONITOR.
ANALYSE.
OPTIMISE.
AUTOMATE

# Gain real time visibility over your communities with 365mesh IoT portal.




## WE ARE FOUND GLOBALLY

Australian based, owned & operated with local manufacturing capabilities.

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