

A woman in a striped shirt and a young child in a yellow shirt are filling a water bottle at a public water station. The station has a sign for 'AUSTINMER BEACH' and a map showing nearby locations. The scene is overlaid with a blue tint.

Smart Water Metering Solution

POWERED BY
365mesh

Monitor, manage and deliver smarter water solutions
All in one IoT and AI Solution

This water refilling station is a joint project between Wollongong City Council and the Australian Thermal Lens Ltd



Smart Water Meter IoT solutions for councils and communities

Protecting your space, ensuring your peace. Clean, safe, secure.

Managing water efficiently is a challenge for organisations of all sizes. Traditional analogue meters are costly to read, prone to errors, slow to detect leaks, and often lead to billing disputes. These limitations increase operational costs, reduce water efficiency, and can undermine trust with residents, tenants, or stakeholders.

Water utilities and councils are under growing pressure to manage water more efficiently and cost-effectively. Traditional water meters, which require manual readings and provide limited visibility, create several challenges for residents, like rising operational costs, limited visibility, water scarcity, including integration gaps - legacy systems making it hard to gain real-time insights and automation.

Our Smart Water Metering Solution, powered by the 365mesh IoT platform, transforms how water is monitored, managed, and delivered. By combining certified smart meters, secure low-power networks, and advanced data analytics, it provides automated, real-time readings, rapid leak detection, accurate billing, and detailed usage insights. Whether you are a council, water utility or property developer, this solution enables proactive, data-driven management, helping reduce water loss, improve operational efficiency, lower costs, and strengthen trust.

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

Phase 1



Sensors/ Devices

Installing sensors to collect data from your environment



Network and Connectivity

Deploying and/or managing your network to connect the sensors to the cloud



Data Processing

Converting raw data into meaningful information



User Platform

Offering visibility on your environment and tasks automation through our industry specific application powered by 365mesh

Phase 2

Phase 4

Smart Water Meter Monitoring: Our Approach



Multi-vendor support:
Connects with a wide range of certified smart meters.



Open standards:
LoRaWAN & NB-IoT communications with published data formats.



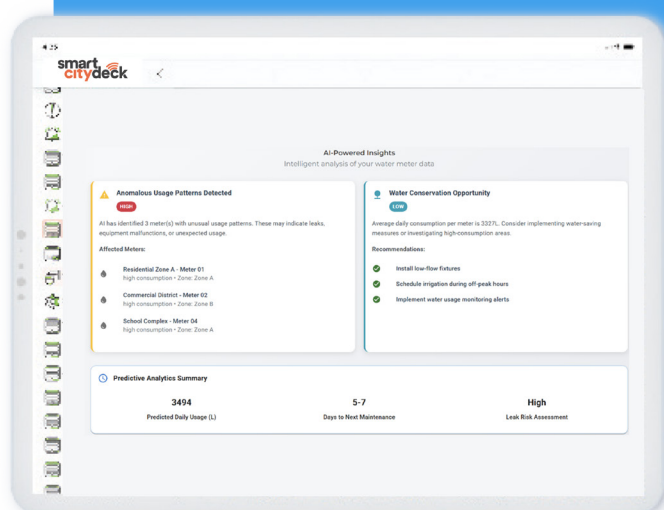
No lock in: Freedom to integrate with open platforms & choose devices as needs evolve.



Certified accuracy:
NMI-approved meters ensure compliance and reliability.

- > **Smart Meters** – Accurately record water consumption and transmit data automatically. 365mesh works with a wide range of certified smart meters, using open-standard connectivity (LoRaWAN or NB-IoT) to give councils freedom of choice and avoid vendor lock-in.
- > **Connectivity Options** – Flexible communications using either LoRaWAN (long-range, low-power for wide-area coverage) or NB-IoT (carrier-grade cellular IoT for high reliability and deep indoor penetration).
- > **SmartCityDeck** – Securely collects, stores, and analyses data from thousands of meters at scale.
- > **Dashboards & Alerts** – Deliver clear, actionable insights for operators and customers on usage, leaks, and anomalies

SmartCityDeck key advantages:



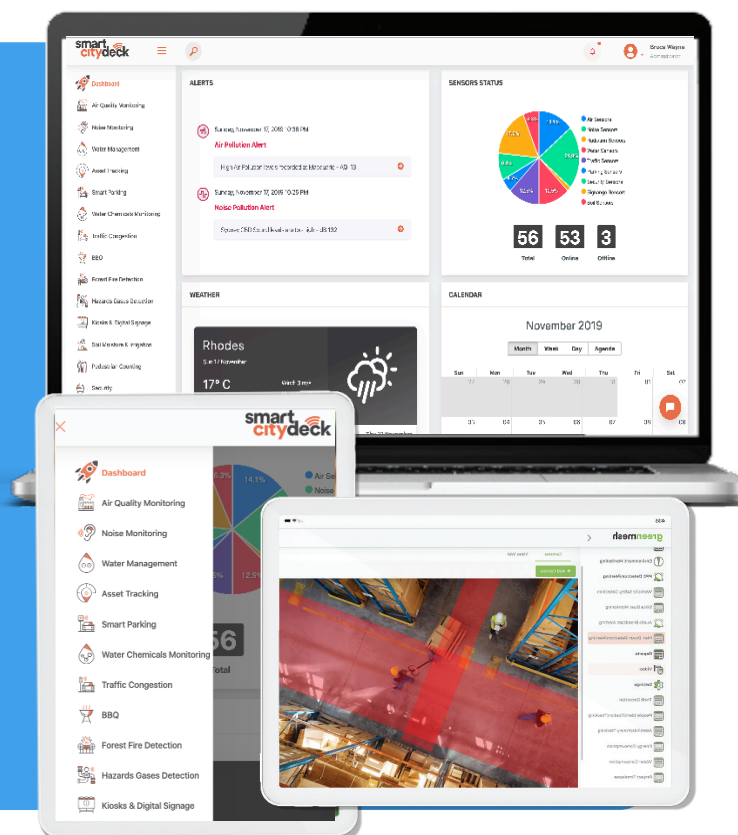
- > **Automated Meter Reading:** Eliminates manual site visits through remote data collection, reducing operational costs and human error.
- > **Real-time Insights:** Instantly detects leaks, tampering, and abnormal consumption, enabling rapid response and preventing water loss.
- > **Intelligent Analytics:** Identifies anomalous usage patterns, highlights water conservation opportunities, and applies predictive insights for proactive maintenance and planning.

SmartCityDeck key advantages:

- ➔ **Flexible Connectivity** – Supports both LoRaWAN and NB-IoT communication, allowing deployment choices based on coverage, cost, and scalability needs.
- ➔ **Scalable & Secure** – Manages thousands of connected devices with enterprise-grade encryption, ensuring performance and data integrity.
- ➔ **Customer Engagement** – Enables transparent billing and usage insights through seamless API integration with customer systems—building trust and encouraging conservation.

24/7 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.
- ➔ Automatically monitor and manage daily water use, reduce costs and be alerted to potential leaks.
- ➔ Water consumption information is provided daily that can be accessed both by customers and Council.
- ➔ Get centralise water monitoring for multiple properties, and monitor different operational areas remotely.




- ➔ Gives companies and councils the chance to develop strategies to reduce and conserve water usage.
- ➔ Enables Council and companies to respond more effectively to usage enquiries.
- ➔ Supports compliance with local government regulations, ensuring water entitlement limits are respected.



Key Challenges with Analogue Meters vs Benefits of Smart Meter Solution

Challenge	Impact	Smart Meter Solution	Benefit
Manual Reading	Time-consuming, error-prone, costly.	Automated remote readings.	Lower costs, safer operations, faster billing.
Leak Detection	Leaks go unnoticed, causing loss and complaints.	Real-time alerts.	Reduced water loss, fewer complaints.
Aging Meters	Wear causes inaccurate readings.	Digital meters with self-diagnostics.	Accurate billing, revenue assurance.
Consumer Disputes	Infrequent/estimated bills cause mistrust.	Data access via portals/apps.	Higher satisfaction, fewer disputes.
Delayed Issue ID	Tampering or abnormal usage found too late.	Continuous monitoring detects anomalies early.	Proactive management, reduced risks.



smart citydeck

An end-to-end IoT solution making the quality of life within cities and daily activities simpler, easier, and more effective.

POWERED BY

365mesh

Smart CityDeck utilises advanced AI and machine learning, as well as purpose-built sensors to aid councils and cities to manage local wellbeing and provide safe, clean, convenient public spaces.

Smart CityDeck is an end-to-end IoT solution that help councils and companies make educated real-time decisions to immediately respond to issues and maintain assets efficiently, while collecting data to provide information for better long-term planning, including capacity and usage information.

Our use cases

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



Crowd Detection and Alerting

Count people in large event spaces, track queue lengths and movement to estimate waiting times and manage capacity.



Illegal Dumping and Monitoring

Monitor waste sites and detect unauthorised dumping in private and public properties.



Digital Twins (Interactive & Real-time)

Virtually gain visibility of a physical space or object with accurate data collection, environment simulations and educated predictions.



Sun Ultraviolet Radiation

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



Traffic Flow Monitoring

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



Temperature Monitoring

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



BBQ

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



Asset Tracking

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



Security

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



Forest Fire Detection

Monitor smoke and other combustion gases and detect preemptive fire conditions.



Waste Management in Rubbish Bins

Tracks litter level in bins and receive alerts when bins reach a specific level or are full.



Smart Parking

Monitor individual car park availability and usage. Understand occupancy and trends.



Measurement of Soil Moisture and Irrigation

Measure the moisture of sport grounds or parks and turn irrigation on and off automatically when necessary



Information Kiosks and Digital Signage

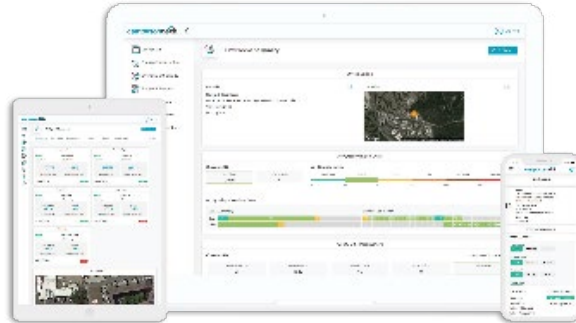
Delivers content from council like advertising, information services and weather or road notifications.



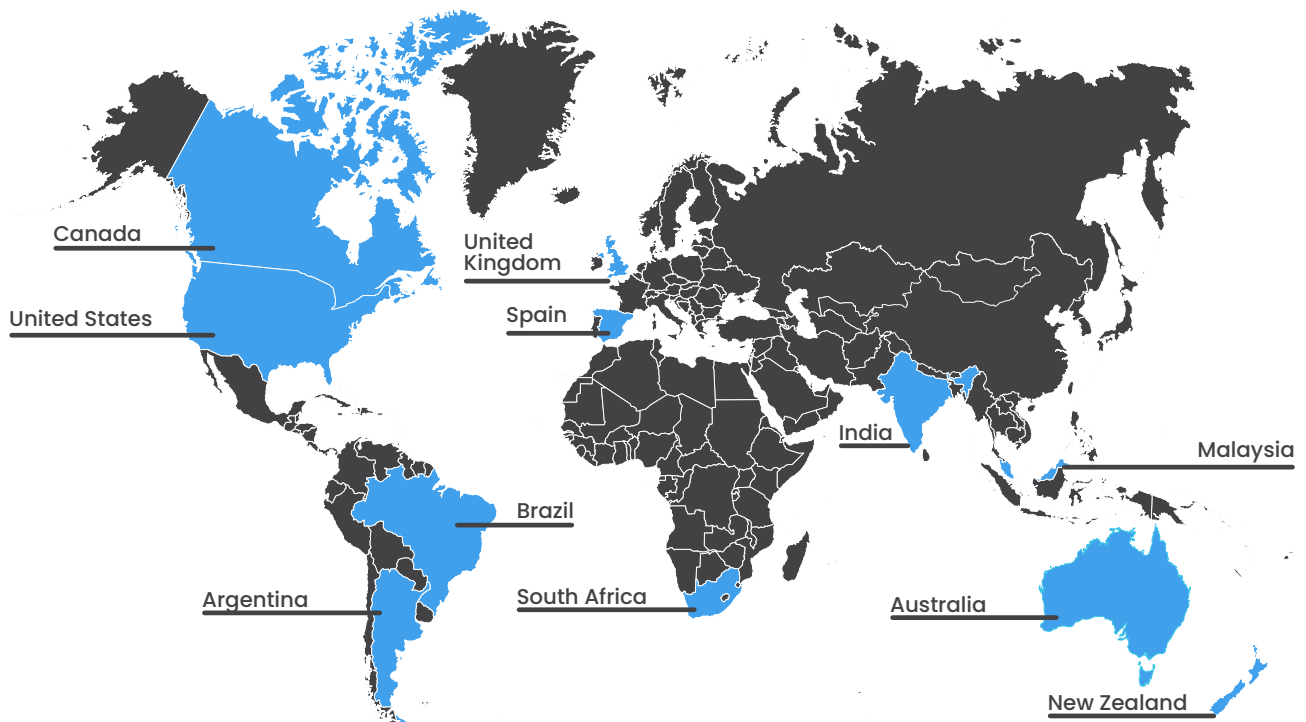
Hazard Gases Detection

Detect gas levels and leakages in councils and public environments.

Gain real-time visibility over water usage and consumption with 365mesh.



WE ARE FOUND GLOBALLY



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.