

Meshed Press Release Embargo until 8th November 2023

Meshed to launch Smart Cities IoT solutions using LoRaWAN® for North America

Meshed is expanding its popular "out of the box" smart cities IoT solutions to North America, after servicing Australia and Southeast Asian customers over the last 8 years. With over 70 cities using its LoRaWAN Network-as-a-Service (NaaS) Smart Cities and People Counting Solutions, the Company wants to make its unique model and products available to customers in the USA and beyond.

Barcelona – Nov. 8, 2023 – Meshed Pty Ltd, is an Australian based IoT systems integrator & was one of the regions earliest adopters of LoRaWAN® technology with deployed networks now covering all major metro & regional Australia populations & now expanding into Southeast Asia and the USA.

Back in 2018, Meshed was the first systems integrator globally to provide a low cost, end to end Smart Cities Starter Kit & nCounter people counting solution specifically designed for Cities, Governments and Universities to enable them to immediately access real time data sets.

Meshed has successfully implemented LoRaWAN solutions for over 70 municipalities in Australia including metropolitan, regional, and remote towns leveraging the extensive range of LoRaWAN from up to 3 miles (5 kms) in urban areas, and up to 10 miles (15 kms) or more in rural areas (line of sight).

Meshed experience in deploying large scale LoRaWAN networks is demonstrated with the <u>Smart Shires</u> network which combined with adjacent networks is one of the largest contiguous LoRaWAN networks in Australia. For the <u>City of Melbourne</u>, Meshed deployed a LoRaWAN solution for street benches, playground & parks utilization. Using real time data generated from a low-cost sensor, the city was able to see their newly installed "smart bench" was used 5.8 times more than the older traditional street bench.

With hundreds of LoRaWAN use cases across smart cities, environmental monitoring & intelligent asset management already deployed, the Company is now expanding its successful Smart Cities Starter Kit and nCounter People Counting solutions for the North American market.

Andrew Maggio – Director of Technology & Operations for Meshed explains, "We wanted to create a simple way for Cities to get started with IoT. Our Smart Cities Starter Kit is designed as a pre-configured, low stress way to get a working, demonstrable IoT solution out of the box & to see data appearing on the dashboard within minutes. Additionally, we addressed the opportunity for low-cost people counting with nCounter, which provides the ability to count people several kilometres away from the nearest WIFI network and send aggregated people counts over LoRaWAN at a fraction of the cost."

Supporting Information

The unique Meshed managed LoRaWAN network approach is designed to help Cities, Governments and Enterprises to kick start their data-driven decision-making journey to massively reduce the complexity and cost of deploying smart cities solutions at scale.

• The Smart Cities Starter Kit comes complete with fully configured and managed LoRaWAN base station/gateway, a selection of smart cities, asset management and environmental monitoring sensors and a real time data visualisation and reporting tool. There is no connection required to your network/telco, no configuration of devices, gateways or software and little technical knowledge needed to get up and running. It just works! The solution is highly customisable, extensible and we provide API support to get your data into other systems. The standards based LoRaWAN network supports hundreds of third-party sensors and it's all based on secure Open-Source software. The Kit is also designed to support additional gateways as well as sensors for large scale LoRaWAN deployments.



The nCounter People Counting Solution was originally designed in partnership with Australian local
government city authorities and uses smart phone devices as a proxy for people to determine the
number present in a location while supporting data privacy protection and employing end-to-end
encryption technology.

Smart Cities Starter Kit 24/7 Reporting with everything out of the box!

Despite the proliferation of smart cities solutions by thousands of vendors over the past 10 years or so, Cities are still struggling with how to simply and securely implement accurate and scalable IoT solutions that can address their real time data pain points.

Meshed has uniquely solved this challenge by assembling a powerful, fully managed kit using LoRaWAN with all the foundational building blocks of a Smart City Solution. In short, the city gets the data they need and Meshed looks after the technology.

The Meshed **Smart Cities Starter Kit** includes access to a LoRaWAN Network Server (with the option of using both private and/or public access connectivity models), a range of popular smart city and asset management sensors, a cloud-based data reporting tools and ongoing technical support.



The successful uptake of the "end-to-end" managed LoRaWAN solution model has seen Meshed also deploy variants such as the Bushfire Fuel Load & Environmental Monitoring Kit and the Industrial IoT Kit.

For the North American market, Meshed has assembled best of breed sensors and maintenance operations to deliver a carrier grade LoRaWAN network with end-to-end encryption built in. The Kit is supported with prepaid technical services and customers can easily expand their selection of sensors for additional IoT use cases using the extensive Meshed catalogue of LoRaWAN devices.

The US915 sensor selection includes:

- Meshed nCounter 'people counter'
- Indoor Temperature, Humidity & Occupancy Sensor
- Outdoor Temperature & Humidity Sensor
- Multi-Function Sensor Node; and a
- GPS Asset Tracker

Key differentiating benefits of the Kit include:

- Ability to set alerts, alarms & event reporting.
- Full data ownership and supports API integration to open data portals, websites & digital twins.
- Supports LoRaWAN open standards & interoperability and both public access & private networks.



- Powerful dashboard visualization & reporting tool.
- 12 months warranty & maintenance.

The Kit supports a wide range of use cases including:

 People counting 	 Asset tracking & maintenance
- Micro mobility & traffic counting	- Public amenities utilization
 Smart parking including accessible parking occupancy 	 Air quality, urban heat island & weather stations
- Smart waste	 Energy, water & gas metering
- Smart street lighting	- Fire & flood monitoring

nCounter Pedestrian Counting Solution

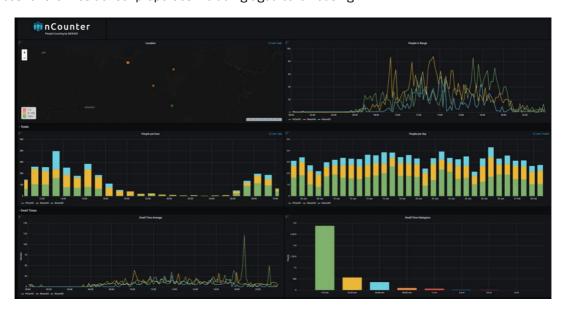
Currently, Cities often do not have sufficient data on existing pedestrian movements or behaviour to understand how public spaces and assets. are being used for maintenance, safety, environmental & economic development purposes. Typical assets addressed by the Meshed people counting solution include, major buildings, sporting fields, public transportation, parks, community events and tourism hotspots.

Whilst there are other digital "people counting" technologies available, such as Public Wi-Fi, Video/Camera Analytics & Object Sensing, these techniques tend to have high infrastructure costs, require mains power, and rely on IP networks, which are increasingly vulnerable to cyber-attack.

To solve this problem, Meshed designed and built a low-power, non-camera based, people counting solution which utilises a combination of smartphone, WIFI and LoRaWAN communications technologies to provide 24/7 people counting data, suitable for both indoor and outdoor placements.

The nCounter also solves the issues of portability and lack of access to mains power by utilizing a solar option to measure pedestrian counts within an omnidirectional range area of up to 328 feet (100 metres). Most importantly Cities and Governments are concerned about the privacy and cybersecurity risks associated with people counting solutions. Uniquely, nCounter data is fully anonymized and transmitted using end-to-end encryption.

Meshed has deployed hundreds of nCounter devices across Australia and Southeast Asia for cities and municipalities ranging from monitoring of public parks to major tourism locations. nCounter is also being used in <u>Singapore Government Housing & Development Board</u> projects to monitor utilisation of communal spaces for their residential properties including aged care housing.



Relevant Links

https://meshed.com.au/lorawan-iot-people-counting/ https://meshed.com.au/smart-cities-iot-starter-kit/



https://meshed.com.au/lorawan-iot-case-studies/

About Meshed - https://meshed.com.au/

Meshed is a global systems integrator dedicated to providing enterprise grade managed IoT solutions for the smart cities, infrastructure, asset management, industrial and environment sectors. Our mission is to enable the adoption of beneficial real time data solutions to as many businesses, cities and communities as possible with the deployment of affordable, secure, and scalable managed LoRaWAN solutions.

Since 2015, Meshed has established significant high availability LoRaWAN coverage across all major populations and regions in Australia as well as now expanding into the ASEAN and North American markets. Meshed was the first solution provider globally to launch a LoRaWAN based Smart Cities Starter Kit back in 2018. That same year the company designed, developed and launched the award winning nCounter Pedestrian Solution.

Meshed customer base includes over 70 local government authorities, many large government and corporation entities across the infrastructure, transport, utilities, mining and manufacturing sectors. Meshed is a proud partner of The Things Industries and MultiTech and is a member of the Global Smart Cities Council, LoRa Alliance, IoT Alliance Australia and Communications Alliance.

About LoRaWAN - https://lora-alliance.org/

LoRaWAN is a long-range, low-power wide area network (LPWAN) technology, created for sending small data transmissions over long distances, using sensors that can last for extended periods on small batteries. LoRaWAN has rapidly gained traction and global industry uptake since its release as an open standard in 2015 by the LoRa Alliance[®]. LoRa Alliance members are major technology players such as Semtech, Cisco, AWS, Orange, Swisscom, Microsoft, Honeywell, Bosch, NTT, Senet, Microchip and including systems integrators like Meshed. LoRaWAN® and LoRa Alliance® are marks used under license from the LoRa Alliance®.

Contact

Catherine Caruana-McManus – Director Sales & Strategy, a Speaker at Smart Cities Expo Barcelona, would welcome the opportunity to meet with any interested parties & show live data feeds of both the Smart Cities Starter Kit and nCounter Pedestrian Counting Solution whilst here at the Conference.

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