



A crowning achievement of the 21st century is the development of Smart Cities, urban areas that use different types of electronic Internet of Things sensors to collect data and, in turn, manage assets, resources and services efficiently. There is no doubt that this newfound ability to collect real-time and actionable information on all aspects of a city's infrastructure has positively impacted the day-to-day lives of countless residents worldwide.

A one-size-fits-all approach to urban operations just won't work as each city has unique requirements. Organizations behind successful smart city implementations recognize these differences and are committed to continued innovations in response to the variables.

The environment around these devices is a very important, but often overlooked factor to consider as most smart city devices are dispersed throughout the city and exposed to the elements. It was just this challenge that UK based Lucy Zodion, part of the Lucy Group, member of the LoRa Alliance® and leader in the development of street lighting and smart city solutions, faced in implementing its newest lighting infrastructure.

Lucy Zodion's smart city platform Ki., communicates via an open, wireless ecosystem of enabling hardware and IoT software and leverages LoRaWAN® communications due to its long signal range and minimal power requirements.

## **Problem**

Ensure that its outside gateways wouldn't be damaged by the challenges of hot weather environments.



## Solution

## MultiTech Conduit® IP67

The highly scalable, certified and surge protected Conduit IP67 gateway is proven to be capable of resisting the harshest environmental factors including moisture, dust, wind, rain, snow, extreme heat and high impact.

## **Benefits**

Enables continuous connectivity and communications so that Ki. nodes are able to transmit street lighting data to generate actionable insights that enhance asset management.

Pivotal to Ki.'s functionality is a LoRaWAN gateway that enables continuous connectivity and communications so that Ki. nodes are able to transmit street lighting data to generate actionable insights that enhance asset management. Ki. has transformed street lighting networks worldwide from illumination hardware into open ecosystems that energize future communities.

Working with a client, Lucy Zodion solved the requirement to perform in the challenges of hot weather environments and to ensure that its gateways, situated outside, wouldn't be damaged. "We needed to validate if heat had an impact upon the technology specification and understand any performance issues upon data collection, against temperature," said Richard Perry, Smart Cities Lead at Lucy Zodion.

"We needed a compatible LoRaWAN gateway that was resistant, flexible, strong and capable of running in any weather."

Having worked successfully with MultiTech in the past, Lucy Zodion, after reviewing numerous gateways on the market, opted for the MultiTech Conduit\* IP67 Base Station, a ruggedized IoT gateway solution, specifically designed for outdoor LoRa\* public or private network deployments. The highly scalable, certified and surge protected Conduit IP67 gateway is proven to be capable of resisting the harshest environmental factors including moisture, dust, wind, rain, snow, extreme heat and high impact.

Lucy Zodion was also reliant on MultiTech's strong support levels and consistent product evolution to meet its business requirements. "MultiTech's brand positioning gave us reassurance, which extended to the customer, helping us to match and exceed expectations. This reinforces our collaboration proposition, of which MultiTech is a key contributor. Utilizing MultiTech's DeviceHQ® Platform was also a plus to Lucy Zodion as this provides remote access to deployed gateways."

Looking ahead, Lucy Zodion will continue to develop smart city solutions that bring together a wide range of collaborators, like MultiTech, to create multi-vendor ecosystems that address unique urban challenges. "We chose MultiTech as a key communications and connectivity collaborator, helping us to produce progressive IoT devices that transform urban infrastructure into a connected ecosystem for smarter, more responsive cities."

"We needed a
compatible LoRaWAN
gateway that was
resistant, flexible, strong
and capable of running
in any weather.

We chose MultiTech as
a key communications
and connectivity
collaborator, helping
us to produce progressive
loT devices that transform
urban infrastructure into
a connected ecosystem
for smarter, more
responsive cities."

Richard Perry Smart Cities Lead Lucy Zodion

