Ursalink Monitors
Traffic Security and
Environmental Data
for Building a Smarter
City In Singapore





# Ursalink Monitors Traffic Security and Environmental Data for Building a Smarter City In Singapore

As cities continue to grow, an increasing number of smart devices are being deployed to combine the concepts of good governance, economy-friendly and sustainable development together for a smart city. Generally initiated by installing cameras for traffic monitoring, smart city projects always end up with a range of deployed IoT sensors, typically LoRaWAN sensors here for environmental monitoring. While IP cameras demand high-bandwidth based on cellular router usually, LoRaWAN sensors are designed to consume low power to ensure economical and operational values.

## **PROJECT**



## **KEY WORDS**

- Public Safety and Traffic Monitoring (IP Camera)
- Environmental Monitoring (Temperature, Humidity, PM2.5, PM10, Wind Speed)

# HARDWARE LIST



LoRaWAN Gateway (Indoor)



Sensor Node/Controller



Cellular Router (PoE)



Solar Panel for UC11-N1

## **SOLUTION**

Recently, our Singaporean partner Infracomms provides a purpose-built communication solution for smart city with the cellular router and LoRaWAN gateway as well as sensor node, which are all well integrated into a smart street light box to effectively support all real-time big data via cellular network and small data transmissions via LoRa network.

## **SOLUTION**

In this application, several kinds of environmental monitoring sensors collect the air quality, wind speed, temperature and humidity data and send it to the UG85 gateway through UC11-N1 sensor node; and UR35 cellular router provides electric power for both UG85 gateway and IP camera via PoE interface, and meanwhile receives data from both devices. Thus, UR35 cellular router works as a packet forwarder and delivers all data to the monitoring center via 4G LTE cellular network, enabling operators to browse the data on the screen then.



#### **DEPLOYMENT**



Get perfect coexistence of high-bandwidth and low-bandwidth data transmission in smart city in Singapore.

## **ADVANTAGES**

- Offers external interfaces to power, connect and manage multiple devices including high-definition IP camera and LoRaWAN gateway;
- Bridges the gap between legacy sensors and LoRaWAN network
- Assures the benefits of fully-private network
- Significantly simplifies deployment processes and smart city maintenance
- Meets Internet access and back-haul requirements
- Perfect balance of governance, budgetand management

#### ABOUT INFRACOMMS

Infracomms is a communication infrastructure supply chain specialist that has many years of experience in supplying and deploying copper connectivity solutions, fiber optics connectivity solution and advanced coverage for indoor and outdoor environment.



Xiamen Ursalink Technology Co., Ltd.

Tel: 86-592-5023060 Fax: 86-592-5023065

Web: www.ursalink.com Email: marketing@ursalink.com