

Today, LoRaWAN® networks wirelessly connect battery operated sensors and devices in places beyond the reach of traditional power and network service providers. Across long distances, LoRaWAN networks securely deliver sensor data to cloud and on-premise applications that turn vast amounts of data into actionable information.







Utilities



Mining



**Manufacturing** 



Oil & Gas

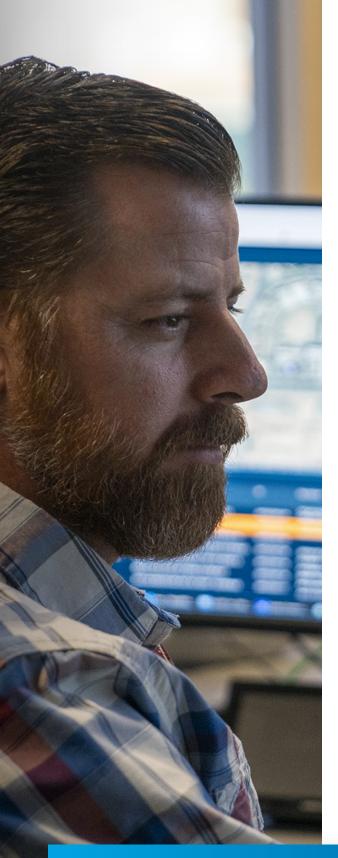


**Shipping** 



**Smart City** 





With thousands of devices and industry specific applications, it seems the number and types of uses for the LoRaWAN is limitless. Here are just a few already being used today.

## Tank and Pipeline Monitoring

Reduce costly manual monitoring of tanks and pipelines. Act on current data from sensors that capture pressure, flow, temperature and more.

#### **Preventative Maintenance**

Identify and address equipment problems early, extending the life of assets and reducing costly unplanned downtime.

#### **Flood Control**

Monitor water retention levels and control pumps and flood gates to redirect water away from people and property.

## Fleet and Asset Tracking

Know the location of high-value physical assets. Reduce loss and quickly locate needed equipment.

## **Personnel Tracking**

Protect your workforce with geofence tools that alert them when entering restricted or hazardous zones. Know exactly who is on site during emergencies and other incidents.

## **Automatic Meter Reading**

Eliminate manual reading costs and errors. Share real-time consumption data with customers to encourage behavior changes.

### **Waste Management**

Optimize trash collection based on waste levels and avoid checking empty dumpsters.

## **Hydrant Monitoring**

Be alerted to open hydrants that can reduce neighborhood water pressure and impact fire fighting effectiveness.

## **Smart Street Lighting**

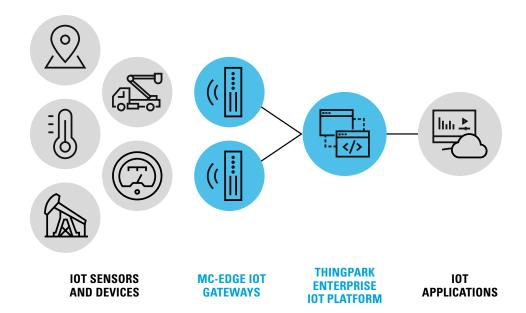
Eliminate manual inspections of street lighting. Reduce energy consumption with adaptive lighting that utilizes actual daylight levels to set lamps.

Organizations deploying IoT networks have to deal with large, heterogeneous networks, a variety of suppliers, complex requirements for each deployment, security concerns for critical infrastructure as well as regulatory and legal obstacles. It is critical to choose a supplier ready to address these challenges.



# THE POWER OF COLLABORATION

Motorola Solutions and Actility have come together to ease the deployment of LoRaWAN solutions. The integration of Motorola Solutions' MC-EDGE Gateway with Actility's ThingPark® platform greatly reduces the complexity of designing and deploying IoT uses such as infrastructure monitoring, industrial automation, geolocation, metering and submetering.





## **Simplified**

- A single, easy-to-use console to connect and configure sensors and gateways
- Easy access to all "ThingPark certified" devices, with automated profile selection
- Ready to use connectors for popular IoT cloud services
- Over-the-air firmware updates for devices



#### Reliable

- Flexible backhaul options with automated failover
- Fully redundant, reliable LoRaWAN infrastructure, with cloud or on-prem backup
- Macro diversity support to reduce packet loss on sensor data reception
- Store-and-forward buffering to maintain data integrity



### **Secure**

- Strong security policies that only allow legitimate traffic while blocking all other activity
- End-to-end data encryption, in transit and at rest
- Activity logging and recording
- Public Key Infrastructure (PKI) support







