Future-Proof: Scalable and IoT-Ready

WISX IoT Platform deployed for Smart Street Lighting is a highly adaptable and scalable unified platform. It easily integrates with other modules or applications and serves as an important platform for cities aspiring to transform with its enhanced value beyond street light management. The interconnected WISX IoT-ready infrastructure can be deployed as a shared network for various smart connected sensors and devices to deliver other city services such as monitoring of noise levels and video surveillance. It can also be applied to various industry verticals (such as public safety and security, intelligent transport, etc.) to benefit residents.

Global Track Record

We have a proven track record in deploying more than 15 million wireless sensors and smart solutions that power and transform cities worldwide. Our solutions help to improve street light management, city planning and operational efficiency, resulting in energy savings essential for sustainable and liveable smart cities. Our global footprint covers various countries such as the UK, the US, Canada, France, New Zealand, Brazil and India.

WISX IoT Suite of Solutions and Products

WISX IoT solutions help smart cities to manage multiple city services on a common platform. The platform leverages best of breed technologies and standards to facilitate data exchange and analytics as well as generate greater insights for predictive actions to be taken to improve efficiency of city services and operations.

Some of our WISX IoT solutions include:

- WISX Smart Street Lighting
- WISX Smart Indoor Lighting
- WISX Smart Energy Resource Management
- WISX Smart Water Resource Management
- WISX Smart Environment Monitoring
- WISX Smart Waste Management
- WISX Smart Lift Monitoring

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Street lighting contributes to an increasingly significant part of cities’ energy use and is a growing concern on municipal budgets. As cities move beyond the current progressive adoption of LED outdoor lights to reduce the cost of energy consumption and manpower for maintenance, there is a growing need to harness smart technologies and the Internet of Things (IoT) with advanced analytics for more sustainable and cost-effective street light management.

**Smart, Efficient and Proactive**

WISX Smart Street Lighting System provides an ideal end-to-end smart city solution on a single platform to deliver full awareness of street light performance while intelligently monitors and controls them remotely in response to varying environmental conditions. It supports automated light management through the use of sensors (e.g. luminosity and proximity sensors), offering a more responsive and efficient maintenance regime with a high rate of availability, reduced downtime and energy consumption. Through this system, data is collected and analysed to better address light faults through enhanced preventive and predictive maintenance, thus optimising manpower and inventory management.

**Key Highlights**

- **Unified and Versatile**
  - Supports multiple wireless communications networks on an integrated IoT platform (e.g. LoRaWAN, NB-IoT, 400MHz Band, RF Mesh and WiFi-LTE)
- **Cost and Energy Savings**
  - Controls and schedules individual or clusters of lightings (dimming, switching on or off) in response to varying environmental conditions
  - Integrates LUX sensors to optimise lighting efficiency
  - Reduces cost and time of maintenance
- **Enhances Operational Efficiency**
  - Provides status of lighting performance on a real-time basis
  - Supports automated lighting management through feedback from supporting sensors
  - Remote access to lighting performance through intuitive application
- **Optimises Maintenance and Resource Management**
  - Automatic fault alert and notification to maintenance team
  - Preventive and predictive maintenance
- **Enhances Security**
  - Secure and robust end-to-end data encryption
- **Future-Proof and Scalable**
  - Supports future add-ons of street lights and smart city services and applications for various industry verticals (e.g. utilities monitoring, environment monitoring, public safety and security)

**Key Components**

- **Hardware**
  - LED Light with Driver
  - Light Control Unit (LCU)
  - Gateway
  - Network Switch
- **Software**
  - WISX IoT Platform
  - WISX Light Management Application

**Features**

- Intuitive application
- Tracking of power consumption over time
- Informative dashboard view with real-time monitoring and alert notification
- Secure AES 128 or 256 data encryption
- Supports multiple communications networks
- Integrates environmental data into the WISX IoT Platform
- Schedules dimming or switching on or off of the lightings
- Future-proof wireless solution to provide for scalability
- Integrates with other sensors for various applications such as video monitoring

**Benefits**

- Users can access the system anytime and anywhere
- Real-time visibility of energy consumption in each power distribution box
- Overview of lighting status to support troubleshooting, repair, maintenance activities, etc.
- Prevents unauthorised interruption during operation
- Users can deploy any communications network to meet their operational needs
- Greater flexibility in customising the lighting schedule based on real-time feedback on environmental conditions
- Remote scheduling and control of lighting to reduce energy consumption
- Minimal infrastructure cost for future add-ons of new lights or other IoT applications
- Provides multiple services and applications for users to better manage, control and optimise resources