



## IoT Intelligent Lighting Control Over Cellular Internet

### Smart Lighting System control based on 3G/4G LTE Wireless connectivity

*Navigateworx provides the best industrial networking solution for different environments. NR500 Series offer seamless LTE communication for the management center to collect and analyze statistical data. It is perfect for our entire business system*



Kevin Willmott

### Summary

Urban road lighting automation control and intelligent management as one of the symbols of urban modernization, its promotion and implementation will also be an important part of municipal engineering construction. The automatic lighting monitoring and management system can flexibly turn on/off the lights, detect faults in time, and greatly improve the management efficiency of the lighting system. The system can automatically store and collect the collected data, and can query at any time, greatly improving the management level. At the same time, it can reduce energy consumption via intelligent voltage regulation. The service life is good and the economic benefits are obtained.

### Customer Needs



### **Energy Utilization**

Most of the street lights are now light-sensing control. As people who have been tired for a day in the middle of the night start to rest, the flow of people is gradually reduced. Some of the deserted areas do not require too much street lighting, resulting in wasted energy and unnecessary costs.



### **Easy Maintenance**

At present, the basic inspection of street lights management is physical inspection. The physical inspection requires a lot of manpower, and the number of street lights is huge. At the same time, it takes a lot of time to manage, which leads to the inability to obtain the state of the street lights in time, and the street light failure and maintenance efficiency are low.

### **Real Time Monitoring**

The monitoring center can monitor the operation of each lamp in real time, and can realize on-demand illumination, which prolongs the service life of the lights and improves economic benefits.

## **Solutions**

Using the Navigatworx LTE VPN router as the data transmission gateway. The controller of the street light system can be connected to the Navigatworx router through the serial port or ethernet port. Remote control and remote maintenance of street lights and saves a lot of manpower and material resources. Makes the city to be smarter.



## Benefits

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### Real Time Connectivity

NR500 LTE VPN router as wireless data transmission equipment has the characteristics of real time online, no time delay at device side. It can be very good to meet the requirements of real-time data acquisition and transmission system.



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### Lower Operational Costs

By enabling communication and centralized control of lights, cities can reduce energy consumption, improve maintenance and lower CO2 emissions. Also, NR500 LTE router as transmission gateway and with intelligence at the lamp level, maintenance departments can

schedule maintenance resources more effectively.

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### Stable Communications

NR500 router is designed for solid performance in harsh environmental conditions and extreme temperatures. build in watch dog and keepalive policy run inside. The multiple links back to make sure the connection between platform and station is always online. Ensure the normal operation of the entire lighting control system.

## About NavigateWorx

NavigateWorx Technologies provides Products, Services, Solutions and Support to the emerging Machine-to-Machine Industry. Our goal is to assist in your efforts to bring Industrial Projects to life, implement Wireline & Wireless Technology Solutions in your Business to simply keep your Devices, Employees and Business connected. That is NavigateWorx.

