

Industry: **Security**

## **Outdoor Lighting Control**

### **The Challenge**

One of B&B's clients operates public lighting all across the Czech Republic. Their goal was to cut operating expenses by remotely monitoring and controlling lighting in real time. If they knew where they were needed, maintenance crews could be dispatched more efficiently. Additionally, less power would be consumed and bulbs would last longer. It was easy to equip the streetlights with photoelectric sensors to observe light levels, and to enable them to monitor their own health. But communicating with them was another story. The lights were located all over the country, and many were installed to enhance security for single users on commercial and residential private property. How could the sensors report to the control center and receive instructions in return?

### **The Solution**

B&B Electronics noted that while the range requirements were very large, the volume of data that needed to be exchanged was not. Our recommendation was against investing in an expensive fiber cable build out. Instead, we suggested making use of the cellular telephone network that was already in place. We equipped the remote locations with our ER75i cellular router and enabled the lights to report wirelessly. Lights that were clustered closely together could be linked with ordinary Ethernet connections, and the entire cluster could then make use of a single cellular router.

### **Why B&B Electronics?**

B&B Electronics doesn't believe in "one-size-fits-all" solutions. Every project has different requirements for range and bandwidth. In this case, there was no need for the massive bandwidth associated with fiber optics, so B&B proposed a rugged, reliable solution that would get the job done without wasting our customer's money.

### **The Product**

ER75i Cellular Router

Standard equipment includes a USB port and Ethernet 10/100 interfaces. Optional ports are available.

-30 ° C to +60 ° C (-22° F to 140° F) operating temperature

Two SIM card ports – Users can use alternate cellular providers for system redundancy