BLACK BOX®

City Road-Works Department Builds IP-Video Security and Surveillance System

- **Industry:** Transportation
- **Client:** City Road-Works
- **Region:** Germany
- **Solution:** KVM, Industrial Networking, Wireless Ethernet Extenders, Video Wall Controller

THE CHALLENGE

A city road-works department in Germany is responsible for installing and maintaining traffic lights and street lights. The department houses its raw materials, including lampposts and cable reels, in an outdoor area on its premises. Until a few years ago, there was never any problem with the outdoor storage area. But, as metal prices rose, the department found itself the victim of metal theft, not once, but multiple times. Lockers and barriers set up to protect the materials proved to be an unsuccessful solution as the thieves were quite professional. The city needed a better solution to secure its outdoor storage area.

THE SOLUTION

To improve security, the department turned to Black Box for an IP-video surveillance system. The first step was to perform an on-site survey to determine the best locations for the security cameras. The next step involved the implementation of the IP infrastructure. The plan called for three distributed camera locations, each equipped with an Ethernet switch connecting the IP cameras. For convenience, it was decided to use a PoE switch to power the cameras over the Ethernet lines instead of running separate power lines. In addition, each camera location was furnished with a wireless Ethernet extender providing a remote, wireless connection to the city's central LAN. Black Box delivered the wireless Ethernet radios

fully pre-configured for an easy plug-and-play installation by the customer. Because both the switches and extenders are being used outdoors, they are designed with NEMA-rated cases and are capable of withstanding extreme temperatures.

A legal regulation demands that the system have the capability to be shut down on demand. To meet this requirement, Black Box provided on-site training to instruct the security team how to control the cameras over the web interface on the Ethernet switch. The operation is quite easy and the team understood quickly how to switch cameras on and off and how to change the viewing angle.

The IT team still needed a solution for displaying the video from the surveillance cameras. Black Box suggested and installed a 2x2 video wall with four HD screens at the gatehouse for 24/7 monitoring.

Because the customer had experienced theft, everyone was worried about the security of computers in the gatehouse. Black Box suggested that the customer back-rack these computers to a secure location inside the main building. The advice was highly appreciated and the customer moved the computers to a secure location and connected them to the gatehouse using a KVM extender.

THE RESULT

"The competence Black Box showed here convinced us that we made the right choice. Everything was simply perfect - the consultancy, services, expertise, and delivery." said the responsible project manager at the city-roadworks department.

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