fiber optic wireless broadcast network transmission

KBC WES Cleans Up the City of Montebello

Municipal Wireless Surveillance System



The City of Montebello faced a graffiti and vandalism problem in its central business district and surrounding public parks. City officials feared the pervasive vandalism was driving away commercial traffic and eroding the very quality of life for local residents and workers.

To address the problem, city officials decided it was time to implement a comprehensive video surveillance system.

The Challenge

The City of Montebello needed more than a standard surveillance system. The goal was to develop a system with a special audio sensor that could detect this hiss of a can of spray paint, allowing the closest camera to respond by focusing in on the perpetrator and producing a time-stamped image of the offender.

To make the system work, a flexible transmission system was needed that would allow the city to place cameras in stragegic locations and properly transport IP Ethernet traffic from those camera locations back to the head end.

The Solution

A point-to-point, wireless Ethernet system that uses unlicensed frequencies in the $5.8~\mathrm{MHz}$ band was deployed. The wireless cameras have a transmission range of 0.8 – $3.2~\mathrm{km}$ (2,500 feet to 2 miles), depending on the radio environment.

Providing both the ability to put the cameras where they were needed and the cost benefit of not having to tear up the streets to install cable, KBC's wireless Ethernet System provided a solution that delivered peak performance and strong return on investment for the City.



Outcome

"The decline has been significant," says Gary Pak, vice president of sales with Axium Technologies Inc., who cites unofficial estimates of a 30% decrease in graffiti incidents. "Before the cameras were installed, the number of graffiti incidents had been going up every year," he said.

As for KBC's equipment, Pak says the performance of the wireless system has been "phenomenal." The system, set up in a point-to-point configuration, had no engineering flaws. "We could do a camera installation in less than a day,"

This case study includes excerpts from an original article (June 2008) by Steven Titch of Security Products Magazine.





