

## Business Class Surveillance

### Customer Profile:



Badgerwash Car Wash in Watertown, Wisconsin owns several car wash facilities across the Midwest. They also manufacture car washing equipment and the chemicals used in the process. Their flagship car wash, which houses four manual wash bays and two full-sized automatic bays, is in Watertown.

"They were losing roughly \$25, 000 to \$50, 000 a year in vandalism, theft and insurance claims. Since the D-link system went in, that's been zeroed."

- Lee Ellis, Owner  
Quantum Technology Solutions;  
Security Division of G&H  
Service Corp.

**QUANTUM TECHNOLOGY  
SOLUTIONS**

**G & H**



**DCS-3220G**

- High Speed 2.4GHz (802.11g)  
Wireless 2-Way Audio Internet Camera

- First-to-Market 802.11g Wireless Internet Camera
- Monitor Your Home or Office Over the Internet
- 2-Way Audio and Built-in Motion Detection with E-mail Notification

## Midwest Car Wash Chain Solves Crime and Insurance Claim Problems with D-Link IP Surveillance Solution

### The Challenge

Badgerwash needed a security surveillance system to protect their car washes from theft, vandalism and fraudulent insurance claims. The facility already had one closed circuit camera in their equipment room, but it provided no surveillance of the outdoor assets, which include the washes, the general premises, and vending and change machines. The camera had no ability to record. It was set up with a direct link to the local police department, but that was not consistently monitored.

Vandalism and thefts occurred as often as every two weeks – more frequently in the summer months. Vandals would damage washing equipment, the buildings, and engage in petty theft. In addition, customers would occasionally make questionable claims that their vehicles had been damaged by the washing equipment; this would have to be paid out by Badgerwash's insurance company. If their insurance deductible hadn't been reached, the payments would directly impact their bottom line.



*Since installing the D-Link IP surveillance solution, vandalism, theft and questionable insurance claims have been zeroed at the Badger Wash located in Watertown, Wisconsin.*

### The Solution

Quantum Technology Solutions, a D-Link VAR, recommended installing a D-Link network with D-Link IP surveillance cameras. "They were losing tens of thousands a year in vandalism, theft and

insurance claims, with no way to dispute them." said Ellis, owner of Quantum Technology Solutions. "Since the D-link system went in, that's been zeroed."

Quantum installed one D-Link DCS-3220g wireless camera in each of the manual wash bays. The two automatic bays have DCS-3420's in them. Ellis chose the DCS-3420 to accommodate low-light conditions. The cameras run 24 hours a day, seven days a week. All the external cameras use D-Link DCS-50 enclosures. In addition to protecting the cameras from the wet, hot, cold, chemical laden and soapy elements, the enclosures look quite imposing.



*In addition to protecting the cameras from harsh environments, the DCS-50 Internet Camera Outdoor Enclosure looks quite imposing and gives a presence of high technology and high security.*

"The D-Link enclosures, in contrast to other manufacturers' enclosures, look mean," said Ellis. "They really do. They give a presence of a very high technology, high security area. They've had no instances of vandalism and no claims at all since the install. Nothing. Zero!"

Since the installation, two people have challenged Badgerwash with false damage claims. One person claimed that the washing equipment scraped their car. "I went back and reviewed the footage, and there was no way," said Ellis. "I showed them the high-resolution recording and asked them if they'd like me to email them the video for their records. They really changed their tune after that."

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**DCS-3420 - Wireless Day & Night Internet Camera**

- Day and Night Audio/Video Monitoring
- Supports Optional Auto Iris Lens- Built-in 0.5 Lux Sensor for Low-Light Conditions
- Aluminum Casing for Optimal Heat Dissipation and Superior Camera Protection



**DCS-50**

- Internet Camera Outdoor Enclosure with Power Supply, Industrial Grade

- Integrated Dual 10Gig Stacking Ports
- Recoverable Ring or Star Stacking Architecture
- Stacks up to 12 Units per Stack
- Advanced Standards Based Enterprise Features

The other person claimed their side mirror was ripped off by the equipment. "I talked to the guy on the phone," said Ellis. "I said, 'Do you know that we have a surveillance system in the car wash?' He replied, 'What's surveillance got to do with anything?' And I said, 'Well, I record all activity at the premises 24 hours a day, seven days a week, in high-resolution color. I'm reviewing, as we speak, your car going through our car wash because I'm looking at your license plate. I see that you came in with two mirrors and I have video that says you went out with two mirrors.' Then the line went dead. He just hung up on me."

### Easy Installation, High Performance, Proven Reliability

Quantum opted for wireless cameras to avoid drilling through walls and routing Ethernet cable. "It was the first time that I actually decided to go to a totally wireless system," said Ellis. "I didn't relish the thought of having to drill about 60 holes through 8 to 12 inches of concrete."

As a testament to the performance of the D-Link equipment, there are no external antennas on the cameras – nothing outside of the housings. The walls are made of high density pre-cast, steel-reinforced concrete. "We've had no problem with reduction in signal," said Ellis. "The cameras perform flawlessly. Everyone was telling me, 'There is no way you can do this.' They told me this after the fact – after everything was set up and working fine." There are two of the cameras that had to be wired, but only because of RF interference produced by the 20hp Blower Fan Motors

Some of the car wash locations use DSL connections to send video back to headquarters, so Quantum needed to manage frame rate and image quality without overloading the uplink. "I was really amazed at how well the cameras responded to turning down the frame rate and the image quality to get the speeds matched up while still maintaining the optimal resolution," said Ellis. "I was pleasantly surprised. This is just one, of a number of things, thing that we couldn't get our competitors' equipment to do, and we have tried them all."

Quantum has since added two more cameras to the Badgerwash headquarters location. They have a total of 13 cameras there. The location uses a D-Link DI-724GU Wireless 108G QoS Gigabit Office Router for Wi-Fi and wired network connections. They also use the D-Link DNS-321 2-Bay Network Storage Enclosure which houses two 1TB SATA hard drives.

### Customer Service Goes Above and Beyond Expectations

Even though the project was a fairly simple installation, the Badgerwash ownership was highly impressed with D-Link's customer service commitment. "They talked a lot about how Quantum and D-Link took such great care of them," said Ellis. "The owner told me directly, 'I want to do business with these guys because of their customer service.' I'm equally impressed. I'm enthusiastic about D-Link's technology but also about their service and support. It gives me a really confident feeling as a technician."

### Superior Results

Badgerwash has been extremely satisfied with the performance, image quality and ease-of-use of the D-Link equipment. "In my opinion, the D-Link equipment performs better than any of the competition," said Ellis. "They're easier to use, and D-Link offers a better quality product at a lower cost." As a result, Quantum and Badgerwash are proceeding to install cameras and networking gear at all of the Badger Wash locations. "Their insurance company is a lot happier, and the local police department is a lot happier. The police have received zero calls since the installation, and there have been no insurance claims. For a company in this business, that's golden."