

# Case Study

Industry: Security

## D3Data, LLC

Project: Mobile security solution

Major challenge: Harsh environmental conditions



### The background.

D3Data, a worldwide innovator in security solutions, builds industry-leading NVR (network video recorder) systems and complete video surveillance systems for portable and remote applications.

One of the company's products, a Portable Web NVR, is a Web-enabled network video recorder for viewing and recording from Smart IP cameras. These cameras enable users to perform advanced video analytics including facial detection and license plate recognition.

The NVR system is designed for use in any moving vehicle, including cars, buses, trains, planes, etc., as well as mobile installations, such as trailer towers at construction sites. The system includes a steel case outfitted with cameras, recording devices, a switch, a CPU, a power supply, and other devices. Because the system is designed for mobile and remote applications, all the components need to withstand extreme environmental conditions including wide temperature ranges, humidity, and vibration. The Portable Web NVR system fills a specific need in the security market, and clients include U.S. and international police departments.

### The problem.

The NVR system is commonly mounted in the trunks of police cars, which subjects it to a lot of vibration and extreme heat. Unfortunately, some of the switches used in the product failed in the field from overheating and shock.

### The Black Box solution.

To solve the switch failure problem, a D3Data business partner recommended Black Box industrial switches for use in the NVR system. So David Boyce, one of the company's Technology Partners, went to [blackbox.com](http://blackbox.com). After reviewing different network switches, he ordered one of our 10-/100-Mbps Hardened Convenient Switches. The switch is rated for use from -13° to 140° F, and has a 12-volt power supply.

When the switch arrived, the first thing D3Data did was to put it through extensive heat, vibration, and shock testing.

Because this was D3Data's first order with Black Box, the company also received a 10% off coupon for its next purchase, which it promptly used to order a second switch for more testing. Both switches passed the environmental tests with no problems.

*"I've been very impressed with your customer and sales support. We build mobile NVR (network video recorder) solutions for police, transportation, and other vehicle and mobile installations for recording from smart IP cameras..."*

*"After our first purchase, we received a coupon for our next purchase. This, combined with the Black Box Hardened Switch solution, has led D3Data management to adopt Black Box switches into our product line, replacing the previous technology we were using."*

*"Thanks and keep up the good work."*

*David Boyce, Technology Partner, D3Data*



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