



## Eaton 9355 is successful “uptime cop” for Black Hawk PD

**Location:**

Black Hawk, Colo.

**Segment:**

Law Enforcement

**Problem:**

The police department’s dispatch center required a highly reliable UPS to ensure its critical operations stay up and running until its generator kicks in.

**Solution:**

Eaton® 9355, Service, Software

**Results:**

Relying on the Eaton 9355 to protect and serve, Black Hawk PD is able to ensure continue uptime for its dispatch center equipment.

*“They’re really good about responding,” Morris says. “If we ever have an issue, they’re here. And the equipment has been great.”*

*Roxie Morris, records supervisor*

**Background**

Nestled in the scenic Rocky Mountains, the historic city of Black Hawk was incorporated in 1864. Located 18 miles west of Golden, Colo., it initially prospered as a milling town before ultimately becoming one of three destination locations in Colorado where limited stakes gambling was legalized in 1991. As the state’s premier gambling venue, Black Hawk is now home to 18 casinos hosting some 20,000 visitors per day.

Ensuring that both residents and guests remain safe and protected is the job of the Black Hawk Police Department, which provides 24-hour law enforcement services with a staff of 34 full-time employees. Answering more than 5,900 police calls for service each year, the department is situated in a historic schoolhouse that was built in 1870. The facility was modernized in the 1990s to support the department’s rapid growth and help deliver on its pledge to provide exceptional service while performing ethically and professionally.

**Challenge**

Severe winds that routinely pummel the mountain town are a constant threat to the Black Hawk Police Department’s dispatch center, which relies on a variety of computer equipment to remain up and running at all times.

“We have computers, servers, telephone equipment,” explains Roxie Morris, the department’s records supervisor. “If something knocks them offline, it takes awhile to reload everything back up.”

And those precious minutes could potentially prove critical. “If we lose power, it could disrupt our 911 and dispatch calls,” Morris acknowledges.

Although the facility depends on a generator in the event of an extended power outage, it requires a highly reliable uninterruptible power system (UPS) to provide essential ride-through while the generator powers up.



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"The UPS has to kick on so our systems and dispatch stay up and so do the phones," Morris explains. "Our generator comes on in five seconds, but that five seconds is enough to knock the equipment out."

Two years ago, the department opted to replace its aging UPS with a new unit. "It just got old," Morris explains of the 14-year-old Eaton UPS. "We decided rather than risking it or fixing it, we'd get a new model."

Extremely satisfied with its prior experience with Eaton, the Black Hawk Police Department once again turned to the company to supply its power protection solution. In addition to exceptional reliability, the department sought a compact UPS that wouldn't occupy too much space in its equipment room. Generator compatibility was another prerequisite.

### Solution

Responding to the call was the Eaton 9355. The unit's innovative design offers one of the industry's best combinations of high efficiency, low input current distortion and high power factor, which results in exceptional economy, adaptability and power performance.

The UPS's double-conversion online design completely isolates equipment from utility power, while a high 0.9 output power factor delivers more power than the vast majority of competitors' models. Additionally, its high efficiency rating of greater than 90 percent across all load ranges reduces utility costs and helps the UPS run cooler, which in turn extends component life.

Having purchased a 20 kVA unit, the Black Hawk Police Department was impressed with the 9355's form factor. Although its footprint is 48 percent smaller than competitors' models, the unit delivers more than three times the runtime from internal batteries. "It was great that it didn't take up the whole room," Morris confirms.

Indeed, the 9355's footprint requires only three to six square feet of floor space — facilitating fast and easy installation, lowering deployment costs, and preserving space for future expansion. Furthermore, the space-saving design of the compact tower package delivers high power density per square foot.

Even more, the 9355 offers scalable configurations that can be upgraded to deliver 50 percent more power without additional hardware. So should the Black Hawk Police Department's equipment needs expand in the future, it can easily upgrade its existing unit to a 30 kVA model.

The department is also impressed with the 9355's low input current distortion of less than 5 percent total harmonic distortion (THD), which allows maximum transfer of power between the power source and protected load. This makes the UPS exceptionally friendly to generators, a key factor for the Black Hawk Police Department.

Eaton's Intelligent Power<sup>®</sup> software suite — which offers applications for remote UPS monitoring, management and shutdown — has also proven advantageous to the dispatch facility. "It sends us a report whenever it kicks on," Morris reveals.

Furthermore, the 9355 constantly monitors its own operation — including voltage, temperature and the function of internal components — then sends an alarm or takes action if a potential problem is detected.

The Black Hawk Police Department gains additional peace of mind knowing its UPS is safeguarded by an Eaton Service Plan that includes routine preventive maintenance on both the unit and the batteries. "We take a lot of lightning hits being up in the mountains," Morris reveals. "It's nice to know that once a year, someone is taking a close look at the batteries and the entire unit."

Morris is also quick to praise the expertise of the highly trained Eaton service engineers. "Service is great. They're really good about responding," she says. "If we ever have a problem, they're here. And the UPS has been great. We've never had an issue."

That's not to say that the 9355 hasn't been tested in the line of duty. In fact, Morris reports that the unit kicks in an average of 10 times per year, often during high winds or rain. Protecting and serving without fail, the UPS enables the Black Hawk Police Department's dispatch center to continue assisting the community. "It stays relatively busy here," Morris reveals. "We always get a lot of medical calls."

### Results

With the 9355 in place, the Black Hawk Police Department is now able to:

- Ensure its dispatch center remains up and running at all times even during blackouts
- Gain the ride-through needed until its generator can kick on
- Keep its critical equipment protected against the most common power anomalies
- Preserve valuable space in its equipment room with the small UPS form factor
- Monitor, manage and remotely shut down equipment with power management software



Eaton 9355

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