

## Success Story: X2nSat

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*CEO Garrett Hill*

# Eaton 9E makes communications efficient for X2nSat

#### Location:

Petaluma, Calif.

#### Segment:

Communications

#### Problem:

X2nSat needed to achieve high reliability with an efficient and compact UPS.

#### Solution:

Eaton® 9E UPS

#### Results:

The Eaton 9E delivers super power protection in a small, highly efficient design.

#### Background

X2nSat (formerly Advanced Projects International) is a VSAT solutions provider serving businesses around the world. Since 1997, the firm has been offering design, integration, implementation, field services, operations and support for VSAT networks, specializing in turnkey satellite solutions for corporate, maritime and rural telephony networks.

Enterprises, telecom carriers, satellite operators, network operators and satellite manufacturers turn to X2nSat as a trusted provider of reliable VSAT solutions for both international and domestic engagements. In addition, businesses that are not specifically focused in satellite technologies can leverage the company's industry relationships and in-house expertise to achieve solutions that keep customers communicating anywhere, anytime.

#### Challenge

When X2nSat began building a new facility from the ground up, it provided a unique opportunity for the company to custom-tailor all of its technology needs, including power protection. A focus on efficiency and green technology was a primary factor in equipment selection, notes CEO Garrett Hill.

In addition, the company sought to "right-size" its solutions, rather than purchase far more than it needed with the hopes of eventually expanding into the equipment. "We work in a lot of facilities that used the 1990s mindset as far as how they engineer their HVAC, power and power distribution systems," Hill explains. "We wanted to make it as simple as possible and deploy very efficient equipment."

An even greater concern for the new facility, which opened its doors on June 1, 2012, was the ability to ensure the continuous uptime and availability of a broad range of critical equipment, including a variety of switches, routers and telecommunication/satellite devices.

"This equipment provides vital communications for a lot of first responders, big corporations and the three largest high-pressure gas pipelines in the nation," Hill reveals. "They use our facility for monitoring and communications. We're like a data center, but instead of having hard drives and data, this is where the data actually passes through."

With so many vital communications channeled through X2nSat, the need for unparalleled reliability is paramount. "If this facility were to become incapacitated, that would be a real problem for us," Hill emphasizes. "911 calls could be interrupted and pipelines could be shut down, which would have enormous repercussions. A lot of first responders might not receive communications. It definitely wouldn't be a good day."

# EATON

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## Solution

Thankfully, X2nSat ensures there are no bad days with the help of the Eaton 9E uninterruptible power system (UPS). Delivering superior power protection in a small package, the 9E protects the company's equipment against damaging power anomalies and outages. Among the newest additions to the Eaton UPS line, the 9E facilitates low total cost of ownership through a trio of key features: energy efficiency, internal batteries and a compact footprint.

Indeed, the 9E is helping X2nSat meet its green goals with a design that yields up to 98 percent efficiency — a significant improvement over competitive offerings. Not only does the unit's design help slash operating costs, it also qualifies for local utility rebates and incentives.

"I'd guess that we are saving an average of 25 percent to 30 percent on our overall energy costs with our new designs versus old ones," Hill estimates, noting that the company upgraded both HVAC and UPS equipment.

Another boon for X2nSat is the 9E's compact footprint, which occupies minimal floor space. Installed within the firm's data center technology room, the unit is up to 35 percent smaller than similar competitive solutions, preserving space for revenue-producing equipment. "We really liked that it was a single enclosure cabinet," Hill adds.

The 9E also plays into the company's desire to right-size its equipment, since the capacity of the UPS can be expanded with a simple on-site visit by an Eaton service technician.

"What we really liked about the 9E was that it was very easily expandable from 40 kVA to 60 kVA," Hill reports. "Yet it was still robust in the way it could handle power distribution."

Having initially purchased a 40 kVA model, X2nSat already intends to expand the unit to 60 kVA in the near future.

Also on the horizon is Hill's desire to deploy Eaton's Intelligent Power® Software Suite, which incorporates monitoring and management of power devices across the network from a single interface, as well as automatic graceful shutdown in the event of an extended outage to prevent data loss.

"The 9E's integrated features for monitoring were very important to us, as well," Hill points out.

Another advantage is the runtime afforded by the unit's internal batteries — up to 21 minutes. Furthermore, the 9E's optional extended battery cabinets (EBCs) provide the flexibility to meet the needs of any runtime requirement.

The fact that X2nSat has successfully relied on a number of other Eaton UPS models in the past largely influenced the firm's decision to purchase the 9E.

"I've been very happy with the Eaton line," Hill acknowledges, noting that the company has a variety of circuits protected by Eaton 9135 units, as well as smaller UPSs attached to individual workstations.

Hill notes that yet another benefit of working with Eaton is the level of service provided by the company. "We received great pre-sales engineering support," he reveals. "And the on-site installation service for the 9E was top-notch."

While X2nSat has not experienced any unexpected issues with the power grid since installing the 9E, Hill reports that the company does conduct extensive testing and simulations to ensure everything is functioning as intended. "And it's always performed as expected," he says of the UPS.

## Results

With the Eaton 9E in place, X2nSat is able to focus on its core communications business, without having to worry about power quality or downtime issues. The 9E enables the company to:

- Safeguard switches, routers and telecommunication/satellite devices against power problems
- Ensure its customers' critical communications remain operational even in the event of a power outage
- Save operating costs through the unit's high efficiency rating
- Preserve valuable floor space with the 9E's compact footprint
- Easily upgrade the capacity of its power protection solution
- Gain maximum runtime through the unit's internal batteries or EBCs



Eaton 9E

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CS153001EN  
October 2012

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