

# C A S E S T U D Y

## MGE UPS SYSTEMS keeps Datek "On-line"

MGE UPS SYSTEMS and Datek

Datek Online Financial Services LLC, located at [www.datek.com](http://www.datek.com) on the World Wide Web, is a pioneer in the online brokerage industry. Since its launch in 1996, Datek has grown to more than 800,000 funded customer accounts and currently executes approximately 80,000 trades per day. With real-time streaming quotes, extended-hours trading and a 60-second commitment, Datek is defining online trading.

At its Jersey City facility, Datek's mission-critical services demand reliable and continuous electrical power—without exception. Datek entrusted MGE UPS SYSTEMS ([www.mgeups.com](http://www.mgeups.com)) to provide the critical power protection needed to keep Datek's computer and telecommunications systems working 24 hours a day. Recently, an inquisitive squirrel demonstrated what a wise decision that was.

### The Challenge

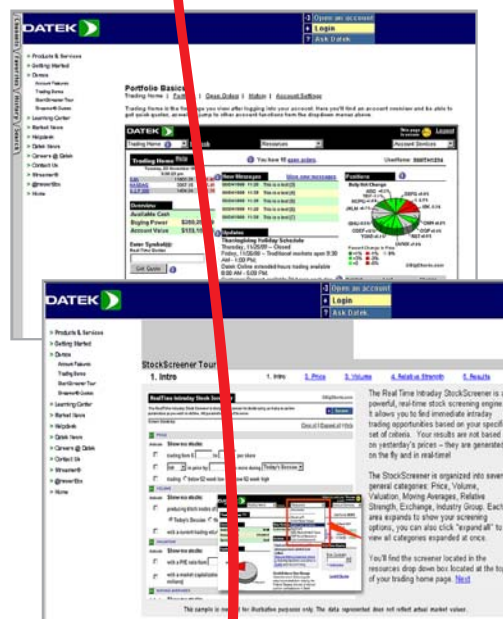
"We must have continuous power to keep our network up and running," explained Peter Coiro, the facilities engineering manager at Datek. "We need to protect our Cisco and Nortel phone systems, and about 2,500 Dell desktop computers."

Peter Braun, the manager of field projects for MGE UPS SYSTEMS, led the MGE team. "Datek requested backup for its entire customer service and tele-service departments, all their telecommunications equipment, and all PCs throughout the entire facility," said Braun. Datek also wanted to ensure continuous power to the building's Main Distribution Frame, its server rooms, its Network Operations Center and numerous Intermediate Distribution Frame rooms.

Power quality within the Datek facility is very consistent. "The building was wired to handle the large number of PC's that would eventually be in use," said Coiro. However, Datek understood that backup power protection was an imperative. Power quality disturbances can originate from within a facility or invade it from the outside.

Running critical loads directly from the utility company inlet is problematic at best, because power related problems are certain to occur at least a few times a year, and are most often caused by factors beyond the control of the utility. Thus, the responsibility to ensure an uninterrupted supply of power must be met within the facility itself.

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While evaluating uninterruptible power supplies (UPS), Datek identified the criteria that were important to them. "Reliability and responsive service were high on the list," answered Coiro. "A user friendly interface was also imperative," he said. However, the quality of the power provided by the UPS was the most important factor. "That would be our number one concern," declared Coiro. "Our computer systems depend on good quality power to keep running smoothly."

### The Solution

To protect Datek's valuable communications and computer systems, MGE recommended its EPS6000 model, configured to deliver 1000 kVA of continuous power, with 500 kVA of redundant backup. The EPS6000 addresses Datek's power quality needs by keeping output voltage transients within 5% of the nominal value, even when exposed to 100% step loads caused by high inrush currents. Additionally, the EPS6000 maintains less than 4% total harmonic distortion (THD) in the output current it supplies, ensuring that the loads connected to it only receive distortion free power under all operating conditions.



The high energy efficiency of the EPS6000 provides additional benefits as well. The unit continually optimizes its internal switching frequency to best match the present load level to the power being drawn from the utility. This enables it to keep its switching losses to a minimum and maintain a high power factor with respect to its input current draw, while providing output power that is free of sags, swells or spikes. The result of this efficiency is a reduction in utility power charges that may actually pay for

the UPS in as little as three to five years.

### The Results

"A UPS installation is a very complicated procedure," said Braun. "Different parts of it are often done by various contractors, each looking to get in and out as quickly as possible. MGE was there through the entire installation process, to ensure that it was all put in and hooked up correctly, and will stand by its customers for the life of the product."

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"Datek's Jersey City neighborhood experienced a power outage when a squirrel jumped into a transformer in Jersey City," confirmed Braun. "The UPS performed as it was designed to and Datek's system was completely unaffected by the neighborhood power outage."

Braun enjoyed working with Datek. "We have a good relationship with Datek, and they were pleased with our continual support throughout the installation process and the training we provided before the system was initially turned on."

"The training was excellent," agreed Coiro. "We've been quite satisfied. The few times we've needed the UPS to perform it has functioned perfectly." When asked to describe the overall performance of MGE's UPS, Coiro replied, "It has been very reliable and trustworthy."

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