

Case study

Uni Systems cuts energy costs and carbon footprint with Vertiv™ UPS



Background

Uni Systems, a member of the Quest Group, has been a leading Information and Communications Technology (ICT) provider for over 60 years, delivering integrated digital solutions and services that support the digital transformation of European and international organizations.

Operating in more than 20 countries with over 1,800 specialized ICT professionals, the company serves clients across banking & finance, enterprise & utilities, government, telecommunications, and EU institutions and agencies.

Its modern data center hosts internal workloads and colocation environments where reliability, efficiency, and high availability are essential to maintaining uninterrupted performance.

Challenge

After more than a decade of continuous operation, Uni Systems' data center faced growing inefficiencies due to aging, energy-intensive equipment. Modernization became critical to reduce power consumption, lower carbon footprint, and maintain uninterrupted availability.

Having sustained a long-term collaboration with Vertiv's authorized partner in Greece, Nigico S.A., Uni Systems continued to rely on Vertiv's innovative data center solutions and Nigico's trusted local support to implement an energy-efficient UPS upgrade.

Specific challenges:

- Equipment performance conflicted with energy efficiency targets
- Rising carbon footprint required urgent mitigation
- Need to optimize overall power and cooling efficiency



Company profile:

Uni Systems, a member of Quest Group, has been a leading ICT provider for over 60 years, delivering integrated digital solutions across Europe.

Industry: Information and Communication Technology (ICT)

Region: Athens, Greece

Solution

Uni Systems upgraded its legacy infrastructure with Vertiv™ Liebert® APM2, a modular UPS engineered for mission-critical environments.

Specific solutions:

- Installed Vertiv™ Liebert® APM2 modular, transformerless UPS for scalability and reliability.
- Incorporated advanced Insulated Gate Bipolar Transistor (IGBT) technology for efficient power switching and conversion.
- Utilized silicon carbide converters to enhance performance and reduce losses.
- Adopted three-level topology for improved energy efficiency.
- Implemented compact, high-density architecture to optimize space.



Results

The modernization project supported by Vertiv and Nigico delivered the following efficiency gains, aligning with Uni System's goals for operational excellence and environmental responsibility:

- Reduced power losses by over **20 kW**.
- Saved approximately **235,000 kWh** annually, cutting OPEX by **15%**.
- Lowered Total Cost of Ownership (TCO) and on-track to achieve ROI within three years.
- Reduced physical footprint by **40%**, optimizing data center space.
- Delivered up to **97.5%** double-conversion efficiency and **98.8%** in dynamic online mode.



Project milestones

- **Seamless system upgrade:** Completed the power infrastructure upgrade with zero downtime, supporting uninterrupted data center operations.
- **Deployment of high-efficiency architecture:** Introduced a modern UPS platform delivering improved performance and energy efficiency.
- **Infrastructure optimization:** Reduced system footprint and enabled modular scalability to support future capacity needs.
- **Operational and sustainability gains:** Achieved measurable efficiency improvements, lowering operating costs and supporting long-term ESG goals.

“Energy-saving technologies in data center operations keep evolving rapidly. As our main responsibility is to deliver cutting-edge technological solutions for critical applications, the energy-efficient Vertiv Liebert APM2 stands out as an advanced and reliable choice. For us and our customers, Vertiv represents reliability and innovation, offering end-to-end solutions that power critical infrastructure with efficiency and confidence.”

— **Dimitris Nomikos,**
Nigico SA, Chief Executive Officer