



Case study

Built for growth: How Sparkle Greece delivered a Tier III-ready colocation facility with room to scale



Background

Sparkle Greece MAE, part of the Sparkle Group, is a telecommunications provider delivering ICT solutions, international connectivity, and digital services through a modern, high-capacity network backbone. The company operates critical telecommunication infrastructures and multiple data centers supporting enterprise and telecom customers.

To meet the growing demand for IT capacity and high-performance connectivity services, Sparkle continues to expand its data center infrastructure. The company operates facilities in Athens (Metamorfosis, Metamorfosis II, and Koropi) and Chania, Crete, supporting secure and reliable digital services across the region.

Challenge

As demand for connectivity and hosting services continued to grow, Sparkle set out to build a new colocation data center capable of supporting increasing IT workloads while maintaining high efficiency and reliability. The new facility was designed to meet Tier III design and construction specifications, with a planned IT load of approximately 700 kW.

Sparkle required a highly efficient cooling infrastructure that could support continuous operations while minimizing energy consumption and enabling a low Power Usage Effectiveness (PUE). The facility also needed a robust power protection and distribution architecture featuring redundant UPS systems and reliable busbar infrastructure to support N+1 redundancy and reliable failover capabilities. In addition, the available outdoor space for heat rejection systems was limited, requiring a compact yet high-performance thermal management solution.



Company profile:

A leading telecommunication provider offering a full range of ICT solutions, global connectivity, services and capabilities through a state-of-the-art backbone.

Industry: Telecommunication and data center colocation.

Region: Athens, Greece

“This colocation facility sets a new benchmark for data center delivery, combining high-performance infrastructure with energy-efficient solutions that enable our clients to grow responsibly and to scale their operations with confidence.”

*Marios Kapenekakis,
Verinso Managing Director*



Solution

To support Sparkle Greece's data center expansion, Verinso, an experienced electromechanical solutions provider, designed and implemented an integrated infrastructure solution leveraging Vertiv™ technologies across cooling, power protection, and power distribution.

The solution included [Vertiv™ Liebert® PDX units](#), configured in a BUS A – BUS B architecture to support the data center's resilience and redundancy requirements. The system features inverter-driven compressors, enabling high efficiency and reduced energy consumption during partial load operation.

To address the site's space constraints, Vertiv and Verinso's custom solution incorporated V-shaped condensers designed to optimize the available outdoor footprint, along with microchannel coil technology to maximize heat exchange performance while maintaining energy efficiency.

The facility was equipped with **Vertiv™ Liebert® Trinergy™ Cube UPS 800kVA** systems, providing robust power protection with high efficiency and redundancy. The dual UPS configuration supports the Tier III redundancy requirements and provides continuous power availability during maintenance or component failures.

Power distribution was implemented using Vertiv™ busbar systems, providing flexible and reliable electricity distribution throughout the facility:

- [Vertiv™ PowerBar HPB](#), rated at 2500A – delivers primary power distribution with high capacity and reliability
- [Vertiv™ PowerBar Track](#), rated at 400A – provides efficient secondary distribution to IT equipment zones

Outcome

With the support of Verinso and Vertiv, Sparkle Greece successfully implemented a reliable and energy-efficient integrated infrastructure for its new colocation data center facility.

The integrated cooling, UPS, and busbar solution supports the planned 700 kW IT load while helping Sparkle Greece meet its Tier III design and construction objectives and maintain strong operational resilience.

The busbar architecture minimizes single points of failure and enables rapid response to any power anomalies, while the energy-efficient thermal management system contributes to the company's goal of achieving low PUE and optimized operating costs.

By combining Vertiv™ technology with Verinso's engineering expertise, Sparkle Greece now benefits from a scalable data center infrastructure capable of supporting future growth and increasing digital service demand. This scalability is achieved through a modular design that allows compute, storage, networking, power distribution, UPS capacity and cooling to scale quickly and cost-effectively as demand grows.

