

# centiel

### Introduction

In the vibrant metropolis of Singapore, where innovation thrives and technology reigns supreme, one global leader stands as a beacon of progress in the digital landscape. Specializing in blockchain and high-performance **GPU computing**, this tech giant is synonymous with innovative solutions and groundbreaking advancements. Behind the scenes of its cutting-edge facilities, however, lies a critical challenge: ensuring an uninterrupted power supply to support its intricate operations.

# The challenge

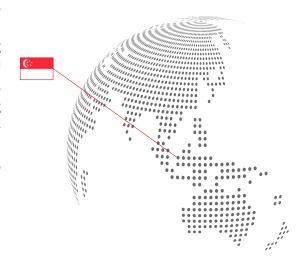
A global leader in blockchain and high-performance computing technology, located in the heart of Singapore, faced a critical challenge: ensuring an uninterrupted power supply capable to support its complex dedicated GPU's operations. As the backbone of innovation in artificial intelligence and computing, any disruption to IT loads could have serious consequences. Potential outcomes included loss of revenue and irreparable damage to the company's image.

### The solution

Centiel's UPS Distributed Technology proved to be the strategic solution for this forward-thinking technology hub. Designed to meet the dynamic demands of modern GPU computing loads, Centiel's solution promised the highest levels of availability and flexibility. Utilizing cutting-edge technology, including Distributed Active-Redundant Architecture (DARA), Centiel's modular UPS ensured "fail-safe" and "safe-hotswap" capabilities, providing seamless power even in the midst of unforeseen challenges.

**Country:** Singapore

**Industry:** Al and Blockchain Data Centre **Product:** Three-phase modular UPS



# The impact

The new UPS systems were seamlessly integrated into the technology giant's infrastructure, providing peace of mind that its operations were protected against potential power outages. When the impact was quantified, the results were astounding: Not only did the company avoid downtime and enhance its reputation as a reliable provider of advanced computing solutions, it also contributed to the advancement of technology on a global scale.

Providing uninterrupted power to the AI cloud computing hardware and software applications supports the company in maintaining its position as an industry pioneer. The societal benefits were also significant, as the improved reliability of the computing infrastructure supported efforts to address labor shortages and improve workplace safety in the technology industry.

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Centiel's modular UPS system was installed in a high-security building, specifically designed to support the most advanced AI cloud computing hardware GPUs, and software applications.

The challenge was to design the electrical system to integrate seamlessly with the UPS systems and provide the flexibility to increase and decrease UPS capacity to meet the current and future demands of changing IT loads. Thanks to the DARA flexibility and small footprint the solution could achieve a power density of up to 1 MW/m².

The installation consisted of fully distributed modular UPS technology with a capacity to operate each Super POD for up to 1.8 MW, the solution was implemented seamlessly without the need for shutdown. In addition, lithium-ion battery systems were used to ensure a minimum backup time of 10 minutes. The installation was

carried out by Centiel's partner DataSphere, ensuring seamless planning and implementation.

#### The conclusion

With Centiel's reliable power solution, the company is well-positioned to play a key role in shaping the future of Al and Blockchain technology in Singapore and beyond. As data center operators strategically allocate space to meet evolving demands, high-efficiency UPS technologies such as Centiel's modular UPS offer scalable solutions for seamless expansion and maximum efficiency.

By introducing energy-efficient, digital, and modular solutions, industry players are aligning themselves with the forward-thinking capabilities of UPS and ultimately shaping the future of power protection.







