





## Introduction

The Donostia International Physics Center (DIPC), located in San Sebastián, Spain, has been a bastion of advanced scientific research since its inception in 2000. With a mission to promote scientific culture and address global challenges from a scientific perspective, DIPC was recognized as a Basque Excellence Research Center (BERC) in 2008 and a Severo Ochoa Center of Excellence in 2019. A pioneer in independent research centers, the DIPC works closely with the public University of the Basque Country (UPV/EHU) and is home to more than 200 researchers and a dynamic program of visiting scientists.

At the heart of DIPC's scientific endeavors is its Supercomputing Center (SCC), a critical hub for advanced research. Ensuring uninterrupted power to the SCC was of paramount importance to DIPC, as any power outage could result in data loss, disrupt ongoing experiments, and hinder scientific progress. To protect its operations, DIPC began a search for the best uninterruptible power supply (UPS) solution on the market that could provide seamless power protection.

Country: Spain

**Industry:** Research institutions **Product:** CumulusPower™





## Solution

An invitation to tender was issued, and respected electrical contractor Novestec Systems, s.l. was selected to supply and install a modular UPS solution that could easily scale to meet potential future load increases. Novestec Systems, s.l. chose to implement Centiel's state-of-the-art UPS solution, CumulusPower™, renowned for its reliability and innovation.

CumulusPower is a true three-phase modular UPS system that guarantees an astonishing "9 nines" (99.9999999%) availability, effectively eliminating system downtime. Its remarkable 97.1% online efficiency minimizes operating costs, making it a cost-effective choice. True hotswappable modules simplify maintenance and reduce the risk of human error during operation. With high-quality, long-lasting components, CumulusPower also significantly reduces the total cost of ownership (TCO).

CumulusPower has an impressive track record, having been installed in data centers and server rooms in more than 100 countries on five continents. It protects over 100 MW of critical power loads worldwide.

The installation at DIPC was completed in just three months. It consists of two 250 kW CumulusPower UPS units in an N+1 configuration, powering both the A and B circuits of the SCC and rack climate equipment.

## **Impact**

Novestec Systems, s.l. faced a significant challenge during the installation due to the limited space in the DIPC facility. However, the compact design of CumulusPower proved to be a game changer, allowing the required power to be delivered within the constraints of the small site.

DIPC now has a UPS solution that will keep its supercomputer running for years to come. This solution is not only flexible enough to scale as needed but also provides the highest performance and availability (uptime). It provides peace of mind to the entire DIPC team, including visiting scientists, and ensures that critical experiments and research can continue uninterrupted.



Antonio Iserte CEO of Novestec Systems, s.l. commented, "One of the main challenges of the installation was the limited space. The footprint of the equipment had to be minimized while still delivering the required power. The great thing about CumulusPower is its comparatively small size, which helped overcome the challenges of the small location".

## Conclusion

Centiel's CumulusPower not only met the immediate power protection needs of the Donostia International Physics Center, but also provided long-term benefits, including increased efficiency, reliability, and peace of mind for researchers and scientists engaged in groundbreaking research.





