





Location

Barcelona, Spain Statistical Institute of Catalonia (IDESCAT)

Challenge

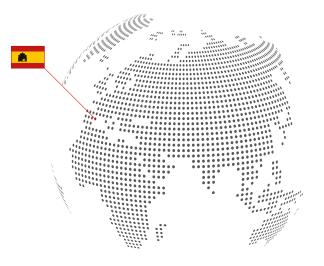
Limited floor space due to the legacy UPS systems and strict COVID 19 restrictions.

Power Protection Solution

 $2 \times \text{CumulusPowerTM CP-100-E-A1 with } 2 \times \text{IM25}$ UPS modules, supported by $128 \times 12 \text{V}/180 \text{Ah}$ batteries providing 2 hours autonomy.

Results

The new UPS, cabinets and batteries were delivered, installed, commissioned, and fully tested without any downtime and the project was completed in record time. IDESCAT's critical power is now fully protected through CENTIEL's leading three phase modular UPS CumulusPower™.





The Project

Leading UPS manufacturer CENTIEL's modular UPS CumulusPower™ has been installed to protect the critical power at the Statistical Institute of Catalonia (IDESCAT) in Barcelona, Spain. IDESCAT is the regional administrative body responsible for official statistics of Catalonia which falls under the control of the Ministry of the Vice-presidency and of the Economy and Finance of the Government of Catalonia.

IDESCAT is responsible for collecting information for the development of studies and trends over time. For example, demographic population figures, demographic phenomena, standards, electoral censuses, labour market, labour force and unemployment and economic health data. By providing quality, relevant and independent statistical information, it contributes to the decision making, research and improvement to public policies in the region.

The installation of two CENTIEL CumulusPower™ UPS have now been completed to support the electrical infrastructure at IDESCAT including the computer room and air conditioning chillers.

CENTIEL's industry-leading three phase true modular UPS CumulusPower $^{\text{TM}}$ is known for its "9 nines" (99.999999%) system availability and low total cost of ownership achieved through its Maximum Efficiency Management (MEM) and low losses of energy. CumulusPower's Distributed Active Redundant Architecture (DARA) and Safe-Hot-Swap functionality ensures any module being added to a system can be fully isolated and tested within a running frame before it accepts any load. This means that CumulusPower™ is currently the safest and most reliable UPS available for critical power protection.

IDESCAT required two hours' autonomy (run time) for each 50kW UPS which was installed. CENTIEL's CumulusPower™ CP-100-E-A1 frame equipped with 2xIM25 UPS modules, each in redundant parallel configuration was selected to protect the power to the facility. Each frame is designed to allow up to 100kW of power protection future proofing the

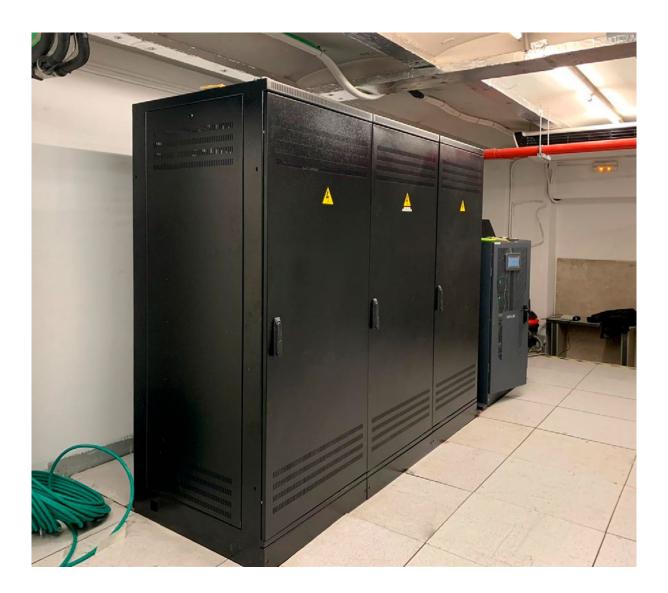
system for growth. 128 x 12V/180Ah batteries are now installed in the plant room to support the load (2x32 batteries per UPS) resulting in a total of four hours autonomy in normal operation.

CENTIEL's UPS was selected following a public tender. CENTIEL was able to comply with all the technical specifications and requirements necessary. In addition, round the clock technical and service support is now provided through locally based engineers supported by CENTIEL. Remote monitoring is supplied through SNMP & Bluetooth available with CumulusPower™. To complete the tender requirements, CENTIEL was also able to deliver the system within the required time frame and budget.

The installation itself needed to be completed without any disruption to the power at IDESCAT. Legacy equipment needed to be removed safely including old batteries, cabinets, and old wiring, and disposed of in a safe, controlled manner.

The existing protection and wiring were repurposed for the new equipment where possible. Any damage





to floors left by the removal of legacy equipment was covered with iron plates and leveled at the height of the technical floor, so they could be walked over safely and lifted for maintenance if necessary.

The collaborative approach between CENTIEL and the technical team at IDESCAT enabled the new UPS, cabinets and batteries to be delivered, installed, commissioned, and fully tested without any downtime. The project was completed in record time, within normal working hours and fitting in around the key holiday dates of Christmas and New Year 2020. The new UPS, cabinets and batteries were delivered, installed, commissioned, and fully tested without any downtime and the project was completed in record time, within normal working hours and fitting in around the key holiday dates of Christmas and New Year 2020. The installation

was made more challenging due to strict COVID 19 restrictions. Engineers needed to comply with social distancing guidelines and wear additional personal protective equipment at all times, to ensure the safety of everyone involved in the project.

The space to work in was limited as the legacy systems were large, therefore part of them had to be removed ahead of the installation of the new equipment. The load needed to be transferred temporarily onto one 60kW UPS to allow part of the existing system to be removed, making space for the new system. Electrical boxes also needed to be configured carefully to avoid an outage.

The plant room itself was located in the basement and access was challenging. Slopes, stairs, and elevator access were used to move out more than 8,000 kg of legacy batteries, cabinets and UPS, and

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the same volume of new equipment then moved in. The disassembly and installation were completed in the short time between 28 December 2020 and 15 January 2021. Installation of UPS management software on one of the IDESCAT (Client) servers completed the install, along with connection and configuration of the communication cards of the new computers on the IDESCAT network. End user familiarization training was also provided to the client, including menu navigation, alarms and switching operations.

The result is that IDESCAT's critical power is now fully protected through CENTIEL's leading three phase modular UPS CumulusPower $^{\text{TM}}$.



