

# RIELLO UPS AND CELLNEX: **POWER TO TELECOMMUNICATIONS**



**Cellnex Telecom is the main infrastructure operator for wireless telecommunication in Europe. Cellnex has made a firm commitment to developing its network, which currently comprises more than 28 000 sites and positions the company to develop new generation networks. It provides services in Italy, Netherlands, United Kingdom, France, Switzerland and Spain thanks to the investments undertaken to boost its transformation and internationalisation drive. Offers to its customers a range of services to guarantee the conditions for reliable and high-quality transmission of voice, data and audiovisual contents. It also develops solutions in the field of “smart city” projects that optimise services to the citizen via networks and services that facilitate municipal management. In this area, Cellnex Telecom is deploying a network of intelligent communications that permits a connection between objects, and therefore the development of a solid ecosystem for the Internet of Things (IoT) in Spain.**

**Cellnex Telecom also plays a relevant role in the deployment of safety and emergency networks for the security forces, known as PPDRs (Public Protection And Disaster Relief). This line of activity summarises both the degree of expertise the company’s team of professionals and the ruggedness and reliability of the architecture of its networks and equipment. The company is listed on the continuous market of the Spanish stock exchange and is part of the selective IBEX 35 and EuroStoxx 600 indices. It is also part of the FTSE4Good sustainability and CDP (Carbon Disclosure Project) indices.**

Cellnex’s business is structured in four major areas: telecommunications infrastructure services; audiovisual broadcasting networks, security and emergency service networks and solutions for smart urban infrastructure and services management (smart cities and the “Internet of Things” (IoT)). In order to develop the Smart City Cellnex works with public administration from local to state level, improving the collaboration with each other.

IoT works towards the optimisation of activity flow and increasing the chances to improve and reach out to new business that previously were unthinkable. Cellnex became one of the most important leaders in its market and demonstrates its values and mission through an ethical behaviour respecting essential principles such as tolerance, respect and collaboration.

These fundamental elements are key to Cellnex and it is therefore important that all the companies that wish to collaborate and/ or consult on a project have firm ethics and principals throughout the company.

Some of the most important values listed below are also part of the ethical principles of Riello UPS:

- Development & Innovation: constant evolution with the development of new technological product and research in to developing the latest solutions.
- TCO (Total Cost of Ownership): optimisation of investment and management/operating cost.
- Environmental characteristics: improve the exploitation and use of infrastructure capacity using renewable energy and a sustainable development.
- Consumption monitoring: low cost and low power consumption.
- Flexibility: measured by the simplicity of system installation and on the simplification of the operation.
- Efficiency: give high quality and reliable services; efficiently in order to enhance the quality of customers lives.

A common objective of Cellnex and Riello UPS is to achieve maximum efficiency with the least impact, reaching low power consumption.

- Monitoring of energy consumption and carbon footprint: calculation and certification of carbon footprint.
- Energy efficiency management
- Biodiversity management

## **MULTI POWER (MPW): WHY RIELLO UPS?**

Riello UPS has been involved with Cellnex challenging project of guaranteeing continuous secure power and to achieve the maximum

energy efficient power protection for their IT infrastructure.

Cellnex chose to install Multi Power (MPW) the Riello UPS modular solution. The MULTI POWER is designed to protect any critical high-density computer and IT environment, whilst achieving maximum availability. The MPW grows along with the demands of the business without oversizing the UPS - optimizing both the initial investment and the Total Cost of Ownership.

Cellnex solution is arranged using a dedicated stylish cabinet (Power Cabinet) suitable to accommodate up to 7 UPS Power Module (PM), the heart of scalable power generation and continuity each one rated at 42 KW. According with customer needs changing over the time each Power Cabinet can scale in power from 42 kW to 294 kW (7 PM including redundancy) simply adding new plug in PM. Cellnex decided to install 22 Power Cabinet (PWC300) with a total of 93 Power Module of 42 kW divided among 14 sites throughout Spain: this ambitious installation meant that the total Power installed totalled approximately 2730 kW.



Power Cabinet 300 (PWC300)

Multi Power offers a complete electrical protection that can be easily integrated for all critical IT and telecommunications applications, satisfying the ever-changing needs of the network environment. Riello UPS has once again proved its skills and ability to build innovative technologies and reliable solutions, allowing for the different needs of its clients such as Cellnex.

Riello UPS MPW modular solution, selected for this project, can expand its power capability, maintaining the highest levels of power protection, availability, redundancy and investments savings; in this sense Riello UPS MPW grows with the company, optimizing the investment and the total cost of ownership. One of the Key requirements of Cellnex was to guarantee power continuity and they chose the Riello UPS product Multi Power due to the following features:

- Outstanding performance: advanced technologies guarantee maximum rated output with output unit power factor (kVA=kW); regardless of the operating temperature, without power downgrades up to 40°C. Thanks to these performance Multi Power

can ensure extremely low losses at any load level, maintaining a modular solution for any changing UPS environment.

- Maximum availability: innovative control technologies and a design that achieve highest level power
- Outstanding performances: MPW guarantees full rated power even with unity power factor loads (kVA=kW) without any power downgrading and efficiency greater than >96.5
- Scalability: with MPW it's easy to integrate power protection solution for the IT application (as in this case). Indeed, the user can easily increase/expand power adding additional PM (Power Module) or BU (Battery Units).

This kind of modular and reliable solution is perfect for any medium to large business applications. Cellnex were pleased to work with Riello UPS pre and post sales teams and chose this solution for their business.

Once again Riello UPS technical experts advised and provided the perfect solution in order to complete this project.



Power module 42 kW (PM42)

## Features of the range: Multi Power (MPW)

- 22 Power Cabinet (PWC300)
- 93 Power Module of 42 kW
- Utmost availability
- High scalability
- Unmatched power density
- Efficiency > 96.5%
- Multi-control
- Highly flexible
- Multi-communication