



Recently, the construction of the new High Performance Computing Data Center of the University of Groningen (RUG) and the University Medical Center Groningen (UMCG) was completed by EQUANS (formerly known as ENGIE Services). This ultramodern and fully equipped data center was successfully accomplished through excellent collaboration with partners Legrand and VSK Kastenbouw.

CUSTOMERCASE

New ultramodern, fully-equipped data center for the

UNIVERSITY OF GRONINGEN (RUG)



Tony Masure, Business Development Manager UPS at Legrand

"Thanks to the application of efficient electrical and cooling engineering solutions, the energy efficiency rate is very high. The new RUG data center achieves a Power Usage Effectiveness Ratio (PUE) of 1.25 or lower. The residual power that is not used to power the server thus drives other systems such as cooling, power protection or lighting," says Tony Masure (Business Development Manager UPS at Legrand).

Within the university world, there is a sharply increasing demand for reliable and large data storage, superfast data processing, and high-quality computing capacity. A strong and future-proof data infrastructure is crucial for a university like the RUG to continue working on large research projects at an international level.

For the construction of a new data center, the university engaged the services of EQUANS, VSK Kastenbouw, and Legrand, among others. Thanks to excellent cooperation between these partners - combined with a customer-oriented approach - the construction time of this project was barely one year.

INTERACTION BETWEEN EXPERIENCED PARTNERS

The initiation of the project started in 2018, beginning with the calculation phase. EQUANS acted simultaneously as installer and integral general contractor for the design, permits, construction and site. At the start of the project, they immediately brought Legrand - together with data center expert Minkels - and VSK Kastenbouw around the table. This meant that all the specialists could make full use of their knowledge and know-how about

all the necessary components from the outset: cable support systems, busbar systems, UPSs, distribution boxes, data center cabinets... A wide range of solutions was reviewed.

FLAWLESS PROJECT MANAGEMENT, FROM CALCULATION TO COMPLETION

During the preparation and execution of the project, the corona pandemic threatened to throw a spanner in the works when it came to the delivery of materials and communication between the cooperating partners and the customer. Due to the excellent relationship between EQUANS, Legrand, Minkels, and VSK Kastenbouw, specific bottlenecks were addressed from the start through regular (digital) consultation. Even the Factory Acceptance Test of the UPS systems took place virtually and went according to plan.

INTERNATIONAL REFERENCE FOR DATA CENTER APPLICATIONS

The RUG sets high standards for protecting information and guaranteeing the continuity of IT processes. The new HPC (High Performance Computing) data center will therefore be certified by TÜV. It is essential that every part of the entire energy distribution system meets these high standards. For instance,

Legrand developed and installed two high-end UPSAVER 3VO UPSs of 1000kW each for the power protection.

Busbar trunking, cable support systems, main and sub-distribution boards, and Minkels cabinets - produced in Veghel - were also used. The use of sustainable cooling techniques, such as cooling the supercomputer with water instead of air, contribute to this high-tech total solution as well.

OPTIMAL FOLLOW-UP AND AFTERCARE

In the coming months, the new data center will be further prepared for a phased installation of new IT systems, as well as the migration of existing hardware and applications. RUG will start a unique partnership with EQUANS, with a service contract that will last for 1 year. In cooperation with maintenance partners, Legrand will provide ongoing maintenance support services, as part of the 15-year maintenance plan.

Despite the threat of the corona crisis and supply chain disruption, the completion date was reached on time, with an exceptionally strong result in the field of infrastructure and technical components. ■

CUSTOMER CASE

