Power health
ABB DPA UPScale ST 200 UPS for medical laboratory

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A guaranteed supply of clean power is essential for many modern businesses. However, in the health industry, it can be particularly critical. ABB has recently supplied the Swiss-based medical analysis enterprise “Dr. Risch Medical Laboratory”, who conduct blood analyses for hospitals and doctors, with a DPA UPScale ST 200 uninterruptible power supply (UPS) to ensure that their operation has a rock-solid supply of clean power no matter what happens on the utility side.

The processes involved in analyzing blood are particularly sensitive to power interruptions and the consequences of any analysis error can be very serious. Therefore, good quality power must be maintained to the analysis equipment at all costs. So, when the Dr. Risch Medical Laboratory was expanding its analytic operations and emergency backup power system, it was very careful in its choice of UPS provider.

The laboratory already had a UPS, from a non-ABB supplier, but this was too weak to support the expanded array of analysis equipment and the enlarged computing center so a number of potential suppliers of a new system were reviewed. A single visit by ABB’s representative, Enzo Petrolo, was enough for the laboratory to appreciate the many advantages of ABB’s DPA UPScale ST 200 UPS.

ABB’s UPScale ST 200 is a modular UPS system for organizations that aim for zero downtime and low cost of ownership. It delivers true modular power protection up to 200 kW in a single, industry-standard frame. Its flexible design provides a “pay as you grow” model - power modules can simply be added, as needed, without any footprint penalty. Servicing is easy as modules can be replaced without powering down.

The UPScale ST 200 enables cost reduction through a best-in-class efficiency of up to 95.5 percent across a wide load range and near-unity input power factor at partial and full loading (PF of >0.99 at 100 percent load).
“Very important for the lab were the redundancy aspects of the DPA UPScale ST 200,” says Swiss ABB sales manager for Power Protection, Alex Stasolla. “We delivered six 20 kW modules, one of which is redundant, that is, it switches in, only if one of the other five fails. Also, the DPA UPScale’s unique decentralized parallel architecture means each UPS module contains all the hardware and software required for full system operation; modules share no common components. The power availability this delivers is one of the critical features that the laboratory was after.”

In addition to the 120 kW (n+1) UPS, ABB also delivered a diesel generator and elements of the power infrastructure. The project timeframe was three months from the first visit to order completion.