In order to ensure a continuous production and logistics of such large quantities, the supply of uninterruptible, clean i.e. undisturbed power has to be provided.

With the decision for the replacement of the aged UPS installation with state-of-the-art UPScalé ST systems in 2015, the Krombacher Brauerei made the step towards modular UPS technology. In addition, the old systems required too much space and did not feature redundancy and decentralized parallel architecture.

One important argument for the ABB solution was the decentralized parallel architecture (DPA) of the DPA UPScalé ST modules. Each system consists of autonomous UPS modules containing the complete hardware and software required for the operation of the overall system. In the worst-case event when one UPS module fails, the overall system continues operation with the capacity of one module less (N+1-redundancy). “In regard to fail-safety, the concept of a modular exchange was the crucial criteria. Using 10 or 20 kVA modules, each system featured good scalability according to the respective power requirements,” Timo Kleinsorge states.

For ABB Automation Products GmbH this project was the first installation of a UPS system in a brewery. The package included delivery, assembly and commissioning of the three UPS systems including the battery cabinets. In the event of grid disturbances, failures or even loss, the systems switch to battery operation.

In November 2015, the new systems were put into operation. The first UPS system is located in the filling and logistics center of the brewery. The DPA UPScalé ST120 replaces several small UPS systems, which previously backed up separate areas, such as:

The Krombacher Brauerei is the number one for Pils type beers in Germany. In the business year 2015, the brewery delivered an all-time high in terms of output and sales revenues and sold 4.26 million hectoliters of Krombacher Pils alone, their flagship product.
data processing center, filling, logistics etc. The second system, a DPA UPScale ST120 protects process-relevant servers of the brewery’s production facilities and secures the cellar warehouse, control rooms and other process plants. The smallest system, a DPA UPScale ST80, is installed in the basement of the gatehouse where low ceilings and narrow passages favored a compact design. The systems are optimally designed for the required performance and not over-dimensioned.

Through modular technology, the systems can easily expand without having to purchase a new UPS. Furthermore, the N+1-concept provides maximum availability.