

INTERVIEW

Keeping up with the growing demand of data centers

An interview with Domagoj Talapko, Business Development Manager, Power Conditioning



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In today's society, the quantity of data is growing rapidly. For data to be used in many applications it must be stored in a safe and fast manner, but also be retrievable 24/7 365 days a year. Data centers are demanding more and more power. In this interview, Domagoj Talapko, Business Development Manager into data centers, from ABB's power conditioning team talks about ABB's range of products that meet the new demand of this growing industry.

Data Centers require a continuous clean electrical supply for reliable operation. How does ABB's highly innovative products provide a solution for data centers?

Data centers are one of the best representations of critical infrastructure. In today's world, there are numerous challenges within the industry such as constant power increase, the need for flexibility and modularization, high efficiency and high levels of availability. These challenges are tested when you consider data centers operating as microgrids and being implemented into smart grid architectures. Through new innovations, ABB supports electrification products from grid to chip and services that are applicable in the most challenging environments and infrastructures.

What are the consequences of data center breakdowns? Why chose ABB's power protection as a solution?

Loss of revenue is a serious consequence, which can be severe and can potentially damage the reputation of the data center. ABB's products allow a holistic approach to the data center electrification, and enable customers to optimize capital and operating costs. With over 125 years of experience in the field of electrical infrastructure, ABB's constant innovations and adaptations to market requirements are a guarantee for successful implementation and operation.

Please tell us bit about ABB's product range?

ABB's Power Conditioning portfolio is a unique line of low and medium voltage power conversion technology that is part of the product group, power protection. The product range consists of static frequency converters, UPSs, voltage and power conditioners that demonstrate highly reliable and cost-effective performance. With this product portfolio, ABB offers efficient power conditioning solutions that are specifically designed to solve power quality problems and stabilize networks.

Current facilities must deal with the need for energy efficient and reliable power to avoid major losses. How does ABB's systems help with this?

ABB has the capability and resources to optimize entire electrical infrastructures and provide state of the art products and components, such as smart power distribution units, transformers and a whole range of protection and power conditioning systems. Through advanced programs during the design phase, ABB can recommend products and services that will enable the highest levels of efficiency and power quality and simultaneously keeping very high levels of availability.

How does the PCS120 MV UPS offer a flexible solution for higher efficiency and higher reliability in critical power facilities? What are the advantages of the PCS120 MV UPS System?

PCS120 MV UPS is the industry's frontrunner solution for total facility power protection. It operates on medium voltage and by doing so keeps the energy losses minimal. The PCS120 MV UPS system enables clean power supply to the data center, while in the case of grid connection loss a ride through is enabled by the means of energy storage solutions such as standard VRLA or Li-ion batteries, flywheels, ultracapacitors etc. Due to the system modularity and advanced monitoring capabilities the PCS120 MV UPS has a very high inherent availability on a system level.

**What other products feature in the UPS range?
How can they benefit data centers?**

In the power protection portfolio, ABB has standard low voltage UPS solutions utilized in data centers and there is also a highly specialized power conditioning product range from which the PCS120 MV UPS derives from. While the product range covers standard data center configurations, PCS120 MV UPS is utilized for high power data centers (for example >10 MW). Due to the high incremental size (2.25 MW) it reduces the total installed power that is driven by requirement of redundancy, thus it is optimized for the total facility protection (IT and mechanical loads).

What sets ABB's PCS120 MV UPS apart from other products in the market?

It is the possibility of having robust static UPS that incorporates a high level of constant efficiency (>98%). With fast dynamic performances, enabling high power quality supply towards the load, supporting different energy storage solutions is achievable through modularity in different electrical architectures, such as hard parallel with N+1, 2N etc. or ring bus structures.

What does Power Conditionings product range mean for the future of data centers?

As data centers become larger and larger in terms of installed power and already have inherent additional energy sources, such as diesel generators, batteries etc. they will play a more important role in enabling overall commercial grid stability.

This is a huge potential for power conditioning products as these devices can achieve the highest standard of power supply to the load (data center) and allow an improved interaction with the grid.

You can find more information, including technical data, key applications, and a video showcasing the PCS120 MV UPS on ABB's website: [link](#).

To find out more about ABB's power protection solutions:

Web: www.abb.com/ups

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Additional information

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