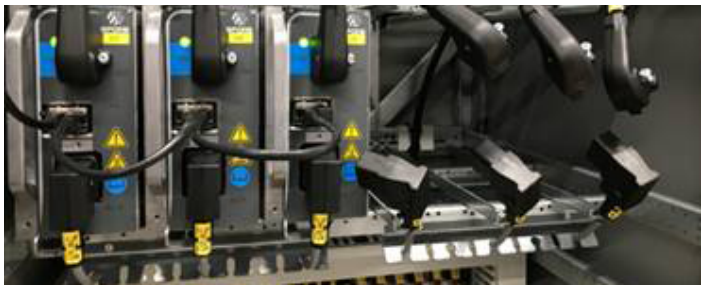
Dutch specialist of mission-critical power systems Rivion relies on Enedo's modular, passive cooling technology



Rivion is a Netherlands-based backup power specialist for critical sites and applications, such as urban transportation systems, power plants and electricity transmission, process industries, and oil and gas production.

Rivion's business is based on the promise that its installations do not fail, and if something unexpected happens, they are being put back to operation quickly. It is extremely important that the technological foundation is reliable and provides continuous service, placing heavy requirements for systems and components used.

Critical applications like rail and utility control systems should operate continuous and un-interruptible, also during power failures. Rivion delivers systems that also supplies the loads during power failures by building right system architecture levels with Enedo power modules:

1) *Top level system architecture: Thanks to the modular design no single point of failure may cause system failure. Even when a module fails the system will continue supplying the loads without using its battery.*
2) *Best available reliability by Enedo's natural convection cooled rectifiers and state of the art remote monitoring (e.g. relays, Modbus, SCADA, Ethernet, SNMP)*
3) *Fast and safe local availability and service if something happens*
4) *Less maintenance as systems are natural cooled so dust is not pulled in the systems*

Ramon de Jong, Commercial Director, Rivion B.V.

Low Total Cost of Ownership through reliability and modularity

Rivion has been working with Enedo (formerly Efore) for about five years, using Enedo's technology in its customer deployments. The initial purchase price for Enedo's products may not be the cheapest available, but over the expected lifetime, Enedo products provide superior TCO (total cost of ownership) due to reliability, modularity and easy expandability.

Enedo's chosen field of technology is passively cooled units that use no fans for removing heat from the system. This is achieved by using energy-efficient components and structural solutions that make heat disperse without moving parts.

Elimination of moving parts improves reliability in itself, but it becomes especially important in solution environments Rivion specializes in, such as metro tunnels and manufacturing plants. These environments are typically both dusty and dirty. Using fan-cooling in these surroundings would mean that dirt eventually finds its way into electronics and causes malfunctions.

Modularity also improves reliability, as if something unexpected after all happens, parts can be easily replaced on the fly. Moreover, modular systems can be expanded and modified with ease as new needs arise.

Modularity and passive cooling are the present and the future in critical power systems

In the field of power systems, Rivion's solutions sit between cheap, fan-cooled modular units coming from telecom and big and bulky, non-modular, thyristor (SCR) technology-based systems on the other side.

The company strongly believes that modular and passively cooled power systems are the winning technology in demanding environments such as mass transportation infrastructure and utility.

We strongly believe that naturally cooled modular rectifiers will be the winning architecture of critical backup power systems. Thanks to modularity the maintenance process can be properly planned and thanks to reliable natural cooled modules the need for maintenance is minimized. Lowest Total Cost of Ownership during 15-20 years life time will drive more and more owners of critical applications to choose modularity and passive cooling.

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