



OPC UA over TSN implementation B&R introduces TSN machine switch for converged real-time networks

B&R has added a real-time Ethernet switch to its portfolio. The new machine switch can be used to set up networks using the vendor-agnostic communication solution OPC UA over TSN. Its design and form factor fit perfectly into the B&R portfolio for space-saving mounting in the control cabinet.

The TSN machine switch allows cycle times under 50 μ s. It offers four real-time capable TSN ports and one standard Ethernet port – to connect a display, for example. The switch also opens up the possibility of star, tree or ring topologies in addition to daisy-chaining. Multiple switches can be cascaded in order to reach remote cabinets or implement large, complex real-time networks. Non-TSN nodes can also be incorporated in the network via the switch. Implementing modular machine concepts is now faster and easier than ever.

Automatic configuration

The switch is completely integrated in B&R's Automation Studio engineering environment. Configuration occurs automatically. The device fully supports a centralized approach to hardware and software management. Application development and machine-specific configurations can be performed either offline or online. The TSN switch can also be used as a conventional unmanaged switch for non-real-time networks. No special configuration is required.

Compact design

Since the TSN machine switch is designed in the X20 form factor, it takes up minimal space in the control cabinet, mounted right alongside the X20 control and I/O system. The switch can be mounted in two different positions, depending on the cable outlet. This allows it to be installed in tight spaces.



B&R is expanding its portfolio with a TSN machine switch for converged real-time networks with vendor-agnostic OPC UA over TSN communication.

About B&R

B&R is an innovative automation company with headquarters in Austria and offices all around the world. On July 6, 2017, B&R became a business unit of the ABB Group. As a global leader in industrial automation, B&R combines state-of-the-art technology with advanced engineering to provide customers in virtually every industry with complete solutions for machine and factory automation, motion control, HMI and integrated safety technology. With Industrial IoT communication standards like OPC UA, POWERLINK and openSAFETY as

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well as the powerful Automation Studio software development environment, B&R is constantly redefining the future of automation engineering. The innovative spirit that keeps B&R at the forefront of industrial automation is driven by a commitment to simplifying processes and exceeding customer expectations.

For more information, visit www.br-automation.com.