



Innovations from Light+Building 2010

Beckhoff presented its entire range of products and solutions for building automation in the new Hall 11 at Light+Building from 11 to 16 April 2010. At the center of attention were numerous innovations, such as the BC9191 Room Controller and the software solution for BACnet/IP. Six Beckhoff solution partners presented their services in connection with PC-based building automation.

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Beckhoff Building Automation: BC9191 compact Room Controller bundles functions for single room control

BACnet/IP supplements open control solutions

Beckhoff's PC-based control technology for building automation primarily utilizes the global standard Ethernet TCP/IP for communication from the management to the field level. In addition to further Ethernet-based communication protocols, such as Modbus TCP, PROFINET and EtherCAT, the integration of BACnet/IP adds another standard for networking different systems, thus extending the areas of application for this open control technology.

Beckhoff integrates BACnet/IP as a pure software solution into its TwinCAT automation suite. The BACnet/IP Server and Client are executable on all Beckhoff Industrial PCs and Embedded PCs. This means that every Beckhoff Embedded PC becomes a BACnet controller with the software extension. Since the I/O level (Bus Terminals or EtherCAT Terminals) can be added directly to the modular Embedded PCs, Beckhoff's comprehensive range of Bus Terminals with over 400 different signal types is also available for BACnet applications. In a modular system, for example, information can be queried via temperature measurement or an occupancy sensor and sent via the appropriate data output to the heating or lighting controller.

The BACnet solution for TwinCAT supports all services of a BBC device (BACnet Building Controller). The BACnet objects are created in the TwinCAT System Manager and can be parameterized and linked there. Data from an I/O terminal or from the TwinCAT program can be connected directly to a BACnet object via a cyclic interface. An acyclic interface is used for reading and writing the "properties" of a BACnet object, so that these can be accessed from the PLC program during runtime. With the aid of TwinCAT, a network can be scanned for BACnet devices and objects or "properties" can be accessed.

www.beckhoff.com/BACnet

i Product announcement estimated market release 4th quarter 2010

All-in-one: compact Room Controller is modularly extendable

With the BC9191 Room Controller, Beckhoff is extending its range of products for building automation and closing a gap in the price-sensitive area of single room control. The compact Ethernet controller covers all standard functions for the control of single rooms. Via the integrated K-bus interface, the BC9191 can be extended modularly with Beckhoff Bus Terminal I/O, offering users the greatest possible flexibility.

Multi-system room automation is of great importance both for efficient operation of buildings and for the individual comfort of the users and, over and above that, to offer substantial savings potential. In the Beckhoff I/O system, an extensive range of over 400 Bus Terminals is available to building technicians for the connection of all building sensors and actuator systems.

The new BC9191 Room Controller closes the gap in very price-sensitive projects with firmly defined functions. By bundling certain functions in one module, the compact Room Controllers are ideally suited, for example, for installation in hotel rooms or office spaces. Rooms or areas with repetitive requirements only require one-time programming of the Room Controller, which is then simply duplicated, depending on the number.

The BC9191 can be used as a compact controller or as decentralized intelligence for room control. Pre-installed software functions facilitate commissioning. On top of that, the BC9191 can also be freely programmed using TwinCAT automation software from Beckhoff. For networking, the room controller is equipped with two Ethernet ports with integrated 2-channel switch. The I/O stations can thus be configured with a line topology, instead of the classic star topology.

In order to implement additional functions, the BC9191 Room Controller can be modularly extended with the entire range of Bus Terminals via the K-bus interface. Standard Bus Terminals and the sub-bus systems relevant for building automation, such as EnOcean, LON, EIB, DALI and M-bus, are optionally expandable.

www.beckhoff.com/BC9191

i Product announcement estimated market release 4th quarter 2010



The Beckhoff BC9191 Room Controller with integrated control functionality represents a compact, low-priced solution for single room control that makes Ethernet available in each room.