

Integrated switch reduces wiring effort



→ The new Ethernet TCP/IP BK9100 Bus Coupler and BC9100 Bus Terminal Controller for the Bus Terminal system complement the already wide range of Ethernet products available from Beckhoff. The two Bus Coupler versions with integrated 2-port switch simplify the cabling between Ethernet stations and greatly reduce overall wiring effort.

The new Ethernet Bus Couplers are based on the BK9000 and BC9000 models, which have been used for years in numerous applications. The BK9100 Bus Coupler connects the Ethernet TCP/IP bus system with over 180 different Beckhoff I/O terminals. The BC9100 controller version contains an additional IEC 61131-3- programmable PLC and can be used as a low-cost local controller for building automation applications, for example.

The new versions also feature an RJ45 port with integrated 2-channel switch. The I/O stations can be configured with a line topology, instead of the classic star topology via switch or hub. This significantly reduces the wiring effort and the cabling costs in many applications. The maximum distance between two bus

stations can be up to 100 m. It is possible to cascade up to 20 BK9100 Bus Couplers or BC9100 Bus Terminal Controllers.

Beckhoff Ethernet components speak several "languages": In addition to ADS TwinCAT system communication, the Ethernet devices also support Modbus TCP. With the TwinCAT System Manager as a driver, the BK9100 Bus Coupler can be set up as a real-time Ethernet version, offering cycle times of up to 1 ms. The Ethernet couplers support 10 Mbaud and 100 Mbaud Ethernet with automatic transfer rate detection. The IP address can be set via DIP switches, or via the associated DHCP server (in networks with DHCP), or via the BootP server available from Beckhoff.