Multiprotocol I/O systems for Ethernet

Marketed under the concept of multiprotocol, TURCK is offering the first fieldbus gateways and block I/O modules that combine three Ethernet protocols – PROFINET, Modbus TCP, EtherNet/IP™ – in one device. The multiprotocol devices can be operated automatically in each of the three Ethernet systems.

The new multiprotocol solutions help users of different Ethernet protocols to effectively reduce the range of device variants required. Multiprotocol devices also enable the identical planning of machines and plant sections with different Ethernet protocols.

TURCK offers multiprotocol devices for its BL20 series gateways for control cabinet mounting and also for the BL67 series for field mounting. IP20 and IP67 block I/O modules including the space-saving BL compact series are also available as multiprotocol devices.

All devices can be installed in line topology using their internal 3 port switches.

Furthermore the devices support the “prioritized startup” functionality: QuickConnect for EtherNet/IP™ and Fast StartUp for PROFINET. In QuickConnect mode e. g. a TBEN-L module starts up in under 90 milliseconds. In Fast Start-Up mode, the device takes less than 150 milliseconds to start up.

Advantages

- Reduced equipment variety
- Enhanced redundancy
- Simplified storage
- Generic system concepts
- Integrated web server simplifies diagnostics and commissioning
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Product highlights

- Operable in the Ethernet systems PROFINET, EtherNet/IP™ and Modbus TCP
- Automatic protocol detection
- Supports prioritized start-up and topology detection as well as LLDP in PROFINET applications
- QuickConnect (QC) and Device Level Ring (DLR) are implemented in EtherNet/IP™
- Available as BL20 and BL67 gateway and as IP20 and IP67 block I/O module

Multi-protocol capable product series

<table>
<thead>
<tr>
<th>Product series</th>
<th>Description</th>
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<tbody>
<tr>
<td>BL20-E-GW-EN</td>
<td>Gateway for the modular IP20 I/O system with digital, analog and technology modules (IO-Link, serial, RFID, ...)</td>
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<tr>
<td>BL67-GW-EN</td>
<td>Gateway for the modular IP67 I/O system with digital, analog and technology modules (IO-Link, serial, RFID, ...)</td>
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<tr>
<td>BL compact</td>
<td>Multifunctional IP67 block I/O modules with digital, analog and technology modules (IO-Link, serial, RFID, ...)</td>
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<td>FEN20</td>
<td>Compact IP20 block I/O modules with 8 digital in-/outputs, or 16 digital universal channels</td>
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<tr>
<td>TBEN-S</td>
<td>Ultra-compact IP67 block I/O modules with digital, analog and technology channels</td>
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<tr>
<td>TBEN-L</td>
<td>Compact IP67 block I/O modules each with 16 digital in-/outputs, or 16 digital universal channels</td>
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