In-Cabinet Modular I/O

In-cabinet (IP20) modular I/O is a cost-efficient networking solution that is used in an enclosure and designed to replace terminal blocks with intelligent I/O. Providing flexible communication capabilities, TURCK in-cabinet modular I/O allows operators to mix and match I/O interfaces and adapters, including digital inputs, digital outputs, analog I/O and RFID. For enhanced performance, in-cabinet modular I/O offers significant space savings with up to 32 I/O on a single card. Modules are ideal for applications with large quantities of I/O, including packaging, conveying and general manufacturing.

BL20 System

The BL20 system is an IP20 Modular I/O system designed for remotely collecting I/O signals. In comparison to costly and time-consuming historic approaches that brought I/O signals back to a single large cabinet, BL20 uses multiple small cabinets placed near the I/O that they control—providing a flexible, modular solution that saves time and money.

Providing enhanced communication flexibility, the BL20 seamlessly mixes and matches I/O types, communication networks, connection technologies and package styles to meet any project needs.



Standard BL20 System

- Programmable features for local or distributed control
- Mix and match slices to create the ideal mix of I/O
- System expands to integrate up to 72 slices to meet diverse requirements
- Screw and tension (spring) clamp wiring bases available



Economy BL20 System

- Multiprotocol gateway with interface to the higher level control system
- Low-cost gateways provide increased value when connecting to open networks
- Integrated Ethernet switch allows a line topology between multiple gateways without use of an external switch
- Accommodate up to 32 I/O modules
- Designed to work with all TURCK Economy I/O slices, as well as standard BL20 slices
- Economy gateway or slice requires tension (spring) clamp base

IN-CABINET MODULAR I/O



BL20 Mechanical Overview

- Operating Temperature: 0 to +55°C (32 to 131°F)*
- Protection: IP20
- Vibration: EN 61131
- Relative Humidity: 5 to 95%, Level RH-2, no condensation
- Shock Test: IEC 68-2-27
- Drop and Topple: IEC 68-2-31 and free full IEC 68-2-32
- Electro-magnetic Compatibility: EN 50 082-2
- Housing Material Lexan (PC-V0)
- Approvals CE, UL, CSA, Class 1 Div 2



IN-CABINET MODULAR I/O

BL20 Gateways

- IP20 Protection
- Suitable for In-Cabinet Applications
 Some Versions Programmable via CoDeSys V2.3
- IEC 61131-3 Programming Structure
- Program in Ladder Logic, Structured Text, or 3 others
 Mix and Match Languages to Suit Application
- Large Library of Pre-written Function Blocks
- Provide Interface between Chosen Network(s) and BL20 I/O
- Up to 72 BL20 Slices can be used with Standard Gateways, 32 with Economy
- Wide Variety of Digital and Analog I/O Available
- Specialty Slices Available inc. RFID, RSXXX, PWM Outputs, and **Encoder Inputs**







x standard feature

- + Via CoDeSys FB
- o Optional