

Your Global Automation Partner

TURCK

System Solutions for Modular Machines



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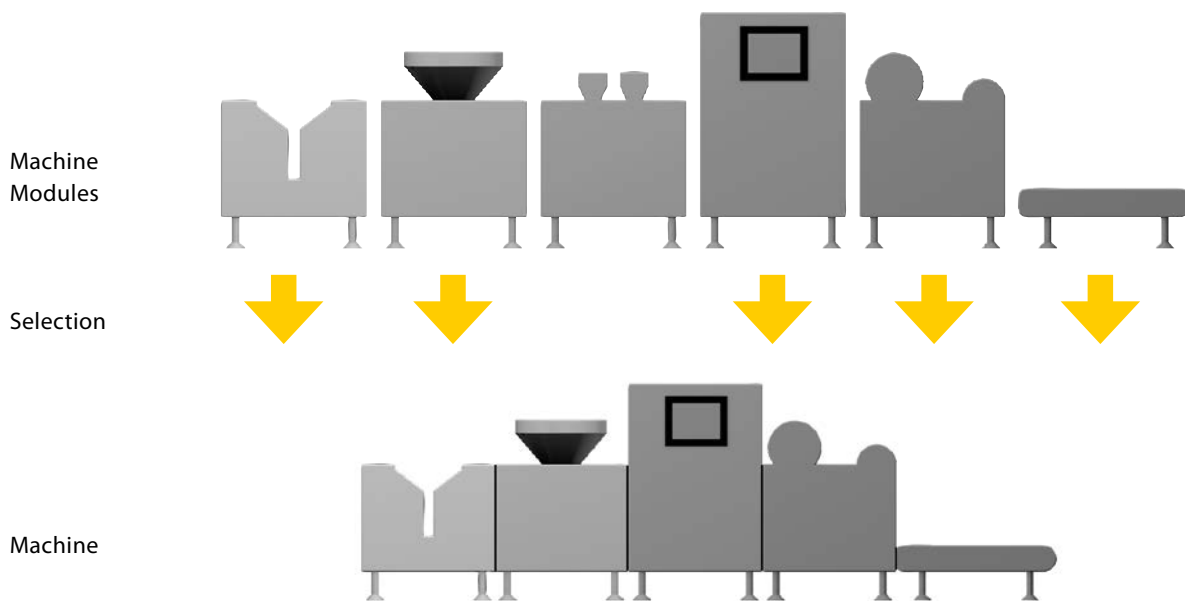
Reduced time to market

Current demands including easy order processes, requirements for drastically reduced delivery times, flexibility and enormous pricing pressure can be best facilitated by modular, flexible machine and process structures.

Reduced machine costs

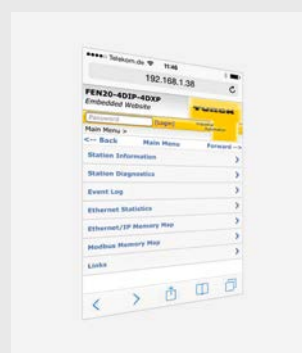
Reducing the costs of building a machine is not only a case of choosing the right components. Ease of integration is the key to success. Building the machine without a cabinet saves time, money and reduces the machine's footprint. Standardizing your machine's automation by using smart components reduces documentation, variety of equipment required, sources of errors, etc. Standardisation enables increased modular reusability and more efficient engineering.

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Flexible use in Ethernet networks

Thanks to the Turck multiprotocol Ethernet technology, the I/O modules can be used in the three Ethernet protocols, PROFINET, EtherNet/IP™ and Modbus TCP. The modules detect the bus protocol used automatically during the startup phase without any interaction by the user.



Support through web server

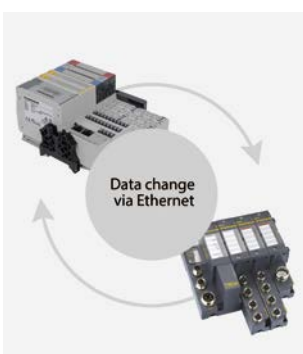
Integrated web servers in the modules simplify commissioning and diagnostics. The user thus sees relevant data such as module type, firmware, IP address or PROFINET name at a glance. Diagnostic information is shown on the web server clearly in plain text.

Your benefits at a glance

- One cabling and future compatibility by using Ethernet components
- Lowest component variety thanks to 3 Ethernet networks in one hardware
- Excellent modular automation equipment fits your modular machine design
- Consequently reduced setup time thanks to autodetect functions
- Integrated Safety functions ensure worldwide conform machinery
- Intelligent decentral logic guarantees the functionality of each machine module and reduces both busload and downtime
- Modularity from your machine design up to I/O-level means excellence in engineering and costs.

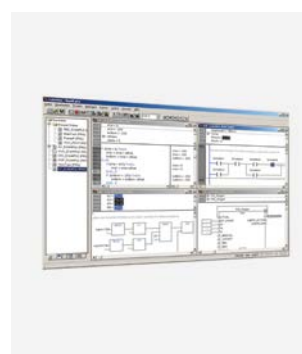


Yesterday's practice



Simple networking

The function of the global network variables integrated in CODESYS enables the simple interconnection of several I/O stations. This makes it possible to connect different systems quickly and simply. Standard transmission protocols enable bidirectional data exchange.



Fast programming

In order to ensure the rapid integration in CODESYS, Turck provides target support packages as drivers for the target system. The I/O modules can thus be simply added to the configuration using drag and drop. Diagnostics and commissioning functions, as well as function blocks also support the user.

BL20
Modular I/O System,
PLC



Fxx20
Block I/O
Module



TBxx and TBIL
Block I/O Modules,
IO-Link, Logic



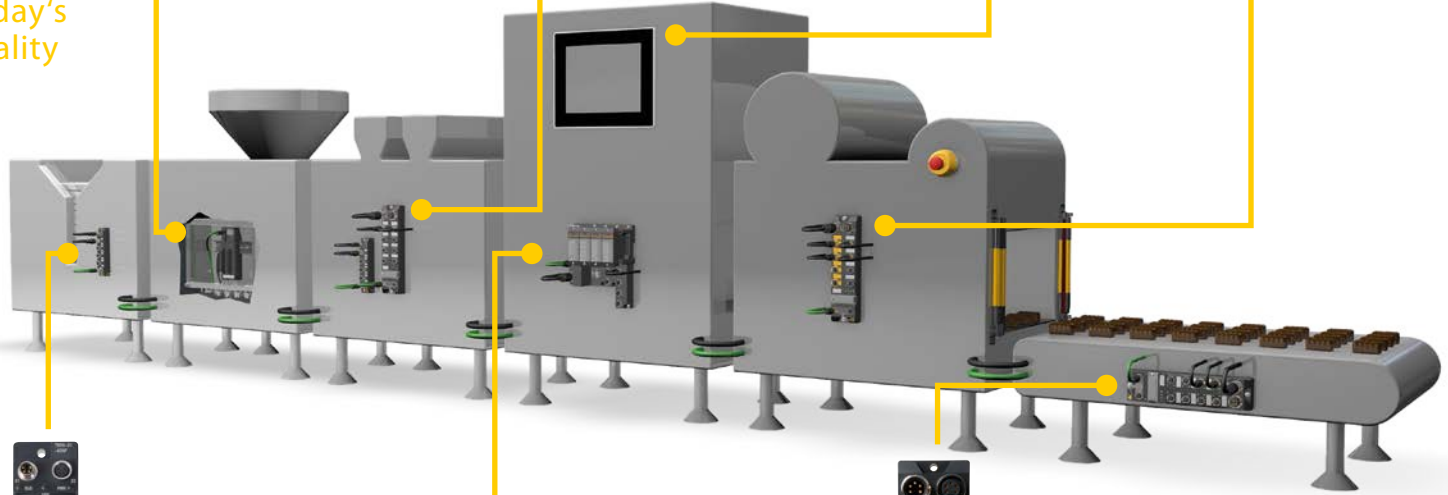
TX5xx
HMI with PLC



TBxx...F...
Hybrid Safe/non Safe
Block I/O Module, Logic



Today's
reality



TBxx
Block I/O Module, Logic



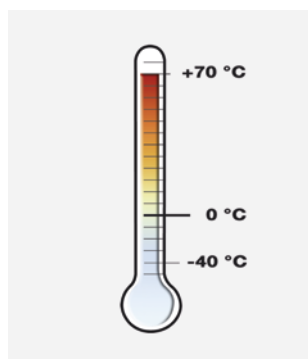
BL67
Modular I/O System, PLC



TBEN-PLC
Block I/O Module, PLC

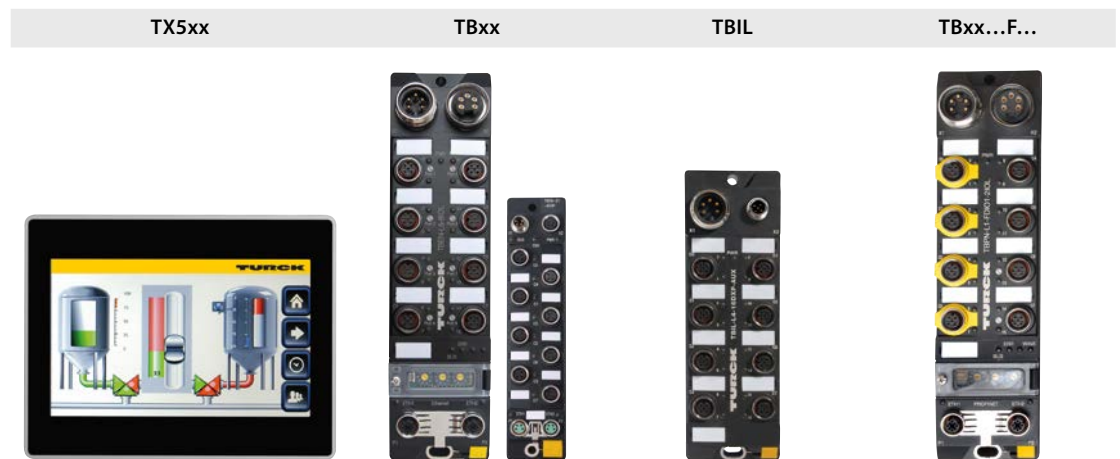


Remote signal processing
The PG gateways of the BL20 and BL67 systems can be programmed with CODESYS and are thus implemented as remote control units. Possible applications include for example the stand-alone control of an application or the remote pre-processing of signals.



Robust modules
The fully potted module electronics and the compliance with IP rating IP65/IP67/IP69K make the block I/O modules extremely robust to withstand the harshest ambient conditions. Many I/O modules also come with an extended temperature range from -40...+70 °C which extends their application range.

Products for Modular Machine Concepts



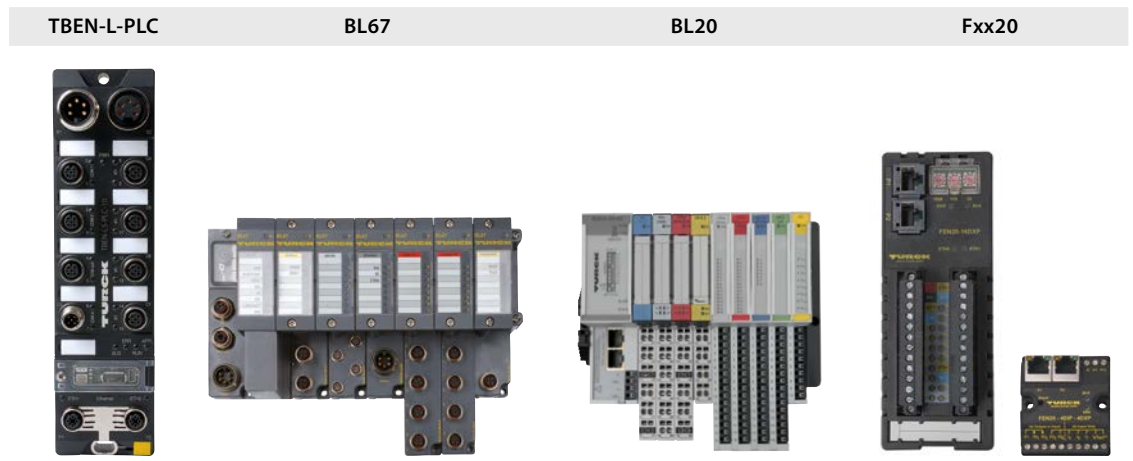
	TX5xx	TBxx	TBIL	TBxx...F...
Description	HMI with PLC	Block I/O Modules	Block IO Hub	Hybrid Safe/non Safe Block I/O Module
Protection class	IP66 front/IP20 back	IP65/67/69K	IP65/67/69K	IP65/67/69K
Logic functions	•	•		•
Programming environment	CODESYS V3	ARGEE		Turck Safety Configurator
Modular				
Compact	•	•	•	•
Digital I/O	•	•	•	•
Analog I/O	•	•		
RFID		•		
IO-Link		•	•	•
More functions	•			
Multiprotocol Ethernet	•	•		
Fully potted electronics		•	•	•
Temperature range	0...+50 °C	-40...+70 °C	-40...+70 °C	-40...+70 °C



Field Logic Controller ARGEE

Turck's FLC technology brings logic to the field level. The web-based programming environment ARGEE expands Turck's block I/O modules with multiprotocol Ethernet platform with logic functionalities. Thus, an I/O module installed in the field becomes

a field logic controller (FLC). The programming and configuration is possible without any software installation thanks to the web-based programming environment – even with mobile devices.



	TBEN-L-PLC	BL67	BL20	Fxx20
Description	Block PLC	Modular I/O System	Modular I/O System	Block I/O Modules
Protection class	IP65/67/69K	IP67	IP20	IP20
Logic functions	•	•	•	•
Programming environment	CODESYS V3	CODESYS V3	CODESYS V3	ARGEE
Modular		•	•	
Compact	•			•
Digital I/O	•	•	•	•
Analog I/O		•	•	
RFID		•	•	
IO-Link		•	•	
More functions	•	•	•	
Multiprotocol Ethernet	•	•	•	•
Fully potted electronics	•			
Temperature range	-40...+70 °C	-40...+70 °C	-25...+60 °C	-40...+70 °C



Over 30 subsidiaries and
60 representatives worldwide!

