

Your Global Automation Partner

# TURCK

## System Solutions for Modular Machines



Products are linked to further information.

# System Solutions for Modular Machines

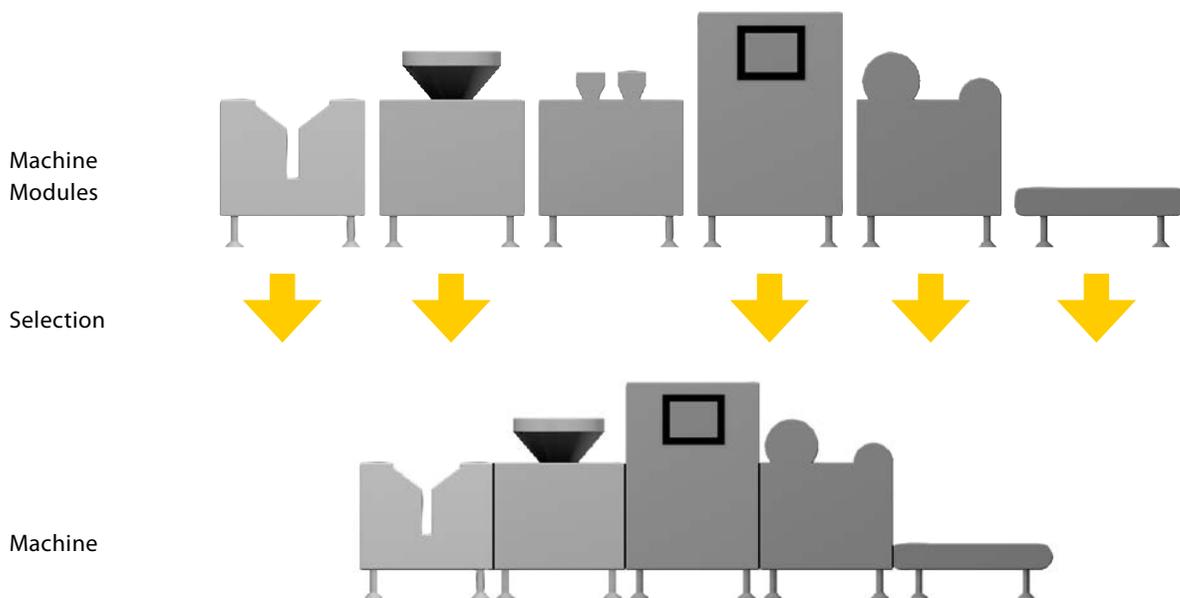
## Reduced time to market

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

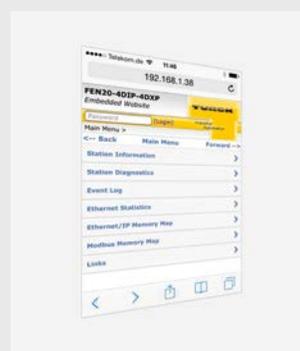
Reducing the costs of building a machine is not only a case of choosing the right components. Ease of integration is the key to success. Building the machine without a cabinet saves time, money and reduces the machine's footprint. Standardizing your machine's automation by using smart components reduces 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

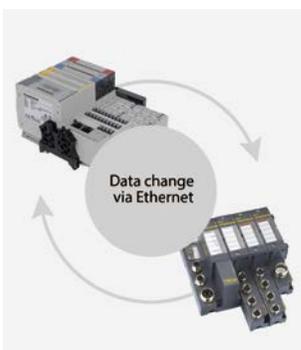
Integrated web servers in the modules simplify commissioning and diagnostics. The user thus sees relevant data such as module type, firmware, IP address or PROFINET name at a glance. Diagnostic information is shown on the web server clearly in plain text.

## 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



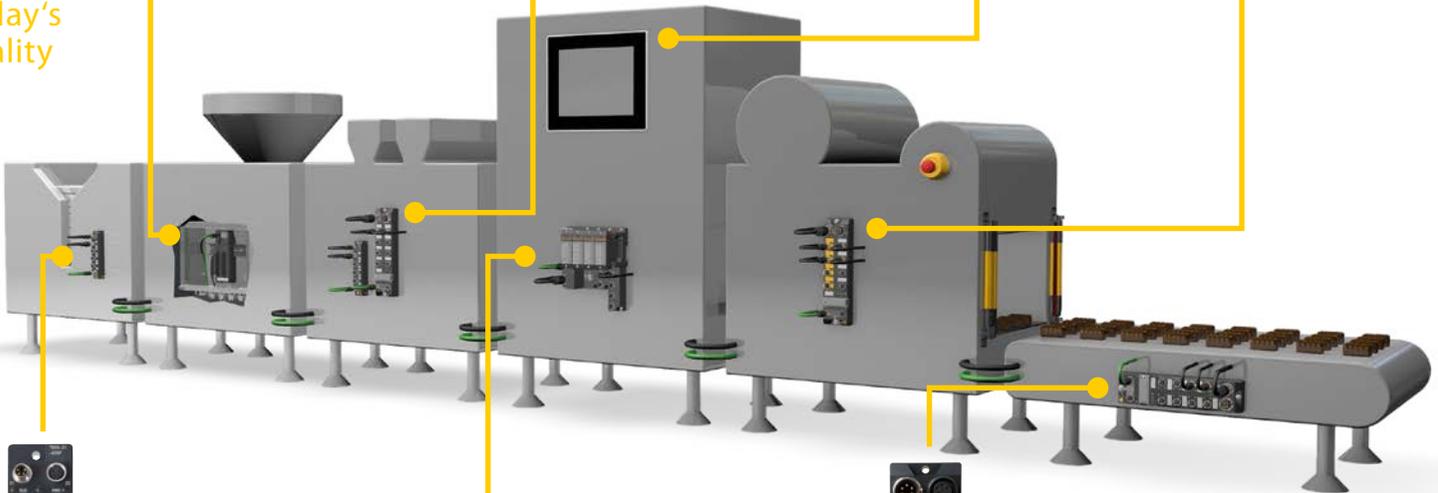
**TX7xx**  
HMI with PLC



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



Today's  
reality



**TBxx**  
Block I/O Module, Logic



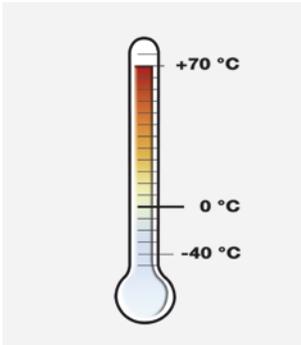
**BL67**  
Modular I/O System, PLC



**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



	TX7xx	TBxx	TBIL	TBxx...F...
<b>Description</b>	HMI with PLC	Block I/O Modules	Block IO Hub	Hybrid Safe/non Safe Block I/O Module
<b>Protection class</b>	IP66 front/IP20 back	IP65/67/69K	IP65/67/69K	IP65/67/69K
<b>Logic functions</b>	•	•		•
<b>Programming environment</b>	CODESYS V3	ARGE		Turck Safety Configurator
<b>Modular</b>				
<b>Compact</b>	•	•	•	•
<b>Digital I/O</b>	•	•	•	•
<b>Analog I/O</b>	•	•		
<b>RFID</b>		•		
<b>IO-Link</b>		•	•	•
<b>More functions</b>	•			
<b>Multiprotocol Ethernet</b>	•	•		
<b>Fully potted electronics</b>		•	•	•
<b>Temperature range</b>	0...+50 °C	-40...+70 °C	-40...+70 °C	-40...+70 °C



Products are linked to further information.



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



Products are linked to further information.



Over 30 subsidiaries and 60 representatives worldwide!

