

Your Global Automation Partner

TURCK

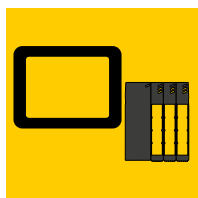
Overview TX HMI, PLC and Edge Controllers



Product images are linked to further information.

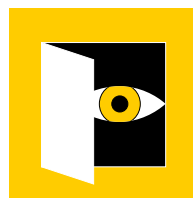
TX Operator Panels – Efficient Control and Visualization

The four product lines of the Turck TX operator panel series provide tailor-made solutions for the control (Programmable Logic Controller PLC) and operation (Human Machine Interface HMI) of simple and medium sized machines and systems.



HMI/PLC – Your benefit

- CODESYS-V3-PLC and HMI in one panel
- Compact and powerful all-in-one solution



More detailed view

- Brilliant TFT displays
- 4" to 21" screen diagonals
- Resistive or capacitive touch
- Gesture control



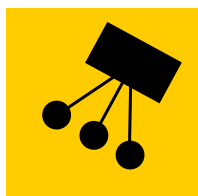
Panel diversity

- Basic, standard, or premium
- Always the right panel for the best price/performance ratio



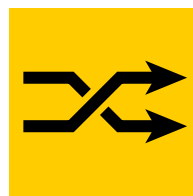
Highly communicative PLC

- CODESYS PLC as the core piece for your system solutions
- Numerous Ethernet/fieldbus protocols as master and slave



More Ethernet ports

- Three independent Ethernet ports
- Physically separated networks
- Internal bridge function for switch functionality



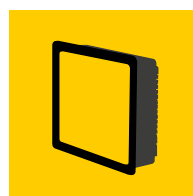
Plug-in modules

- Digital and analog I/O signals
- CAN interface
- Additional serial interfaces RS485/RS232



Visualization with TX VisuPro

- Communication with up to eight controllers at the same time
- Data gateway between PLCs
- PDF, videos, IP cameras, audit trail



Modern hardware

- Scalable system performance
- Glass or plastic film front
- Capacitive or resistive touch
- Metal or plastic housing



II.4.0 + IIOT Ready

- Turck Cloud connection
- OPC UA server/client
- VNC client/server
- MQTT and Node RED in preparation



More approvals

- cULus
- DNV GL ship approval
- For the Ex area: UL Class 1 Div. 2, ATEX, IEC Ex

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Portfolio TX Series

TX100	TX207
Basic Line	Basic Line
Solid HMI operator panels for simple visualization tasks at an optimized good price-performance ratio	HMI/PLC for medium applications featuring data exchange with field devices such as I/O modules, valves, and drives; the TX207 is characterized by the large number of onboard interfaces for Ethernet, RS232, RS485, and CAN



Application area		
Function	HMI	HMI or HMI/PLC
Control	–	CODESYS V3
Performance class*	1 - TX104 3 - TX107, TX110	5 - TX207
Visualization		
Visualization	TX VisuPro	CODESYS TargetVisu (Default)TX VisuPro (Optional)
Display		
Diagonal	4...10"	7"
Touch	Plastic film front, resistive touch	Plastic film front, resistive touch
System		
Controller	Single-core up to 1 GHz	Dual-core 800 MHz
Operating system	RT Linux	RT Linux
General data		
Housing	Robust plastic housing	Robust plastic housing
Temperature range	0...50 °C	0...50 °C
Approvals	CE, cULus	CE, cULus
Approvals for Ex areas	UL Class 1 Div. 2	–



* is used to compare the performance of the devices, based mainly on the computing speed of the processor, which increases proportionally to the factor. Details on the respective processor in the technical data.



Product images are linked to further information.

TX700

Premium Line

For larger applications requiring data exchange with more field devices, including with different protocols on different interfaces; the TX700 devices are also ideal for demanding visualization tasks



TXF700

Premium Line

The TXF700 product series of HMI operator panels offers complete all-round IP67 protection. This enables flexible mounting concepts without the need for protective housing. In this way, modern operating concepts from the world of smartphones and tablets can be transferred to today's harsh world of industrial automation.



HMI or HMI/PLC

CODESYS V3

3 - TX705

5 - TX707, TX710

9 - TX715, TX721

CODESYS TargetVisu (Default)

TX VisuPro (Optional)

5...21"

Glass front, capacitive touch, multi-touch and gesture control

Single to quad-core 800 MHz

RT Linux

High-quality metallic housing

-20...60 °C

CE, cULus, DNV GL

UL Class 1 Div. 2, ATEX, IEC Ex

HMI or HMI/PLC

CODESYS V3 optional

3 - TXF705

5 - TXF707, TXF710

9 - TXF715, TXF721

TX VisuPro (Default)

CODESYS PLC/Visu (Optional)

5...21"

Glass front, capacitive touch, multi-touch and gesture control

Single to quad-core 800 MHz

RT Linux

Metal housing, fully IP67 protected

-20...60 °C

CE, cULus

UL Class 1 Div. 2



Product images are linked to further information.

Use Cases and Application Areas

Areas of application and application possibilities for the TX operator panels can be found in automation technology where processes need to be monitored and controlled. The following four examples show a cross-section of typical applications.



Logistics

Logistics centers offer a wide range of application possibilities for HMI and HMI/PLC devices – from the packaging and distribution center to the control of loading ramps and roller doors. Important conditions and hazards can be made clearly visible to employees in a flexible and dynamic way, for example, through flashing symbols or color changes. Step-by-step work processes can be illustrated visually as a sequence of pictures or drawings. The display of PDFs or videos are further options for achieving and ensuring continuous quality in work processes.



Systems and assemblies

Many machines and assemblies such as pump controls are still controlled and operated in the traditional way using switches, buttons, and indicator lights. Modern and compact HMI/PLC panels offer added value here, too. Firstly, operating data such as pressures, hour meters, or maintenance intervals can be illustrated in a structured way. Secondly, user administration allows different views and information to be made available to various user groups such as operating personnel or service technicians. Also, parameters can be freely adjusted or adjusted within specified ranges at any time.



Compact machines

Other types of smaller machines are, for example, mixers, dosing feeders, or stirring units. Here, the necessary entries are generally performed by the operating personnel. Recipes from a predefined pool are also frequently used. However, changes and optimizations can even be made and saved during operation. Such adjustments can also be logged transparently in combination with a user administration. For this type of application, predefined objects and widgets such as the "Audit Trail" are available. In addition to the software, hardware is also often required in such applications. Special variants are available with stainless steel front, which fulfill the protection rating up to IP69.



Modularization

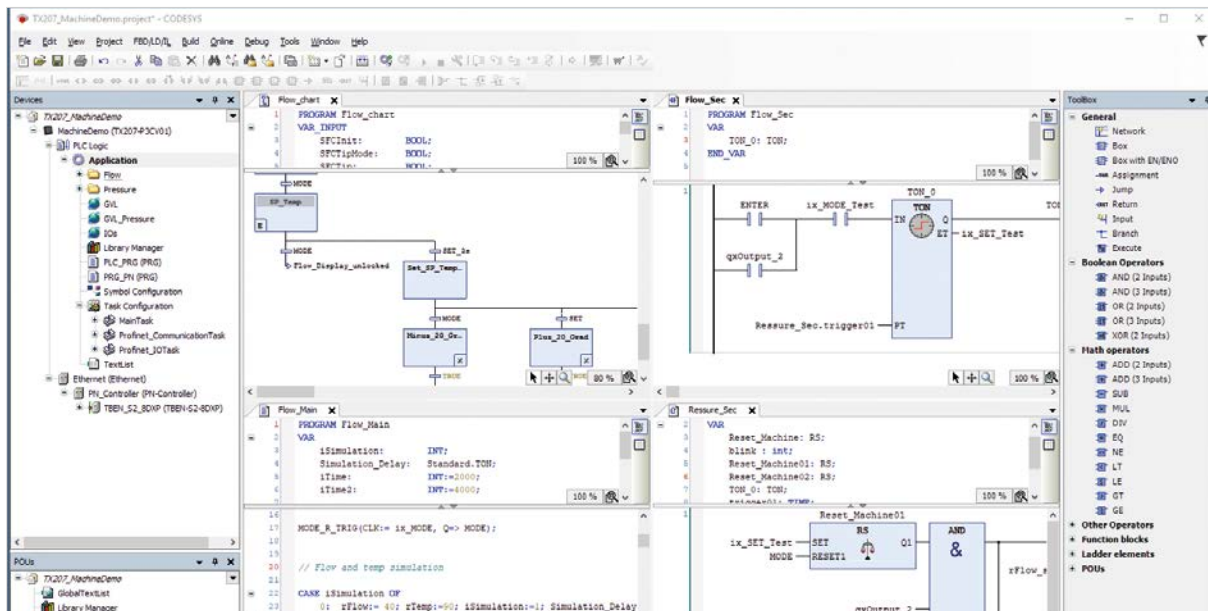
The trend toward the modularization of machines and plants helps the machine manufacturer to standardize plant parts. A kit of independent modules and optional extensions or functions is therefore created, from which users can flexibly put together a configuration to suit their needs. Whether the individual modules or system parts require an HMI or HMI/PLC, or are to be controlled by other modules, can be decided on flexibly according to the level of complexity or optionally at the customer's request. Turck also offers optional PLCs or Field Logic Controllers without their own display. Cost benefits and increased efficiency are just two aspects resulting from the modularization of machines.

CODESYS PLC

The built-in control functionality can be programmed with CODESYS V3 according to the IEC 61131-3 standard. The user can select any of the standard programming languages available; LD, FBD, IL, ST, CFC, and SFC. All supported Ethernet and fieldbus protocols can be configured via the software that allows real object-oriented PLC programming.

The following figure shows four possible programming languages:

- Top left: Sequential function chart (SFC)
- Top right: Ladder diagram (LD)
- Bottom left: Structured text (ST)
- Bottom right: Function block diagram (FBD or FUP)



In addition to the standard libraries that are already available in the CODESYS setup, Turck supports users with their own libraries and function blocks for IO-Link and the Turck BL ident RFID system. In addition, a large open source

community is available on the Internet that offers a wide range of application expertise and provides sample programs and function blocks. One example is the "Open Source Community for Automation Technology", OSCAT

for short. At www.oscat.de you will find extensive knowledge that can support you in the development of your applications and thus considerably reduce time and costs.

Communication possibilities

The CODESYS controller supports the master and slave functions shown in the table. The CODESYS-Feature OPC-UA server is also already licensed in the TX HMI/PLC panels. In addition, standard Ethernet TCP/IP or UDP/IP or serial communication via RS232, RS485, or RS422 can be freely programmed.

Protocol	Master	Slave
PROFINET	Yes	-
EtherNet/IP™	Yes	-
EtherCat	Yes	-
Modbus TCP	Yes	Yes
CANopen	Yes	-
Modbus RTU	Yes	Yes



EtherNet/IP™

EtherCAT®

CANopen

CODESYS Visualization Possibilities

TargetVisu

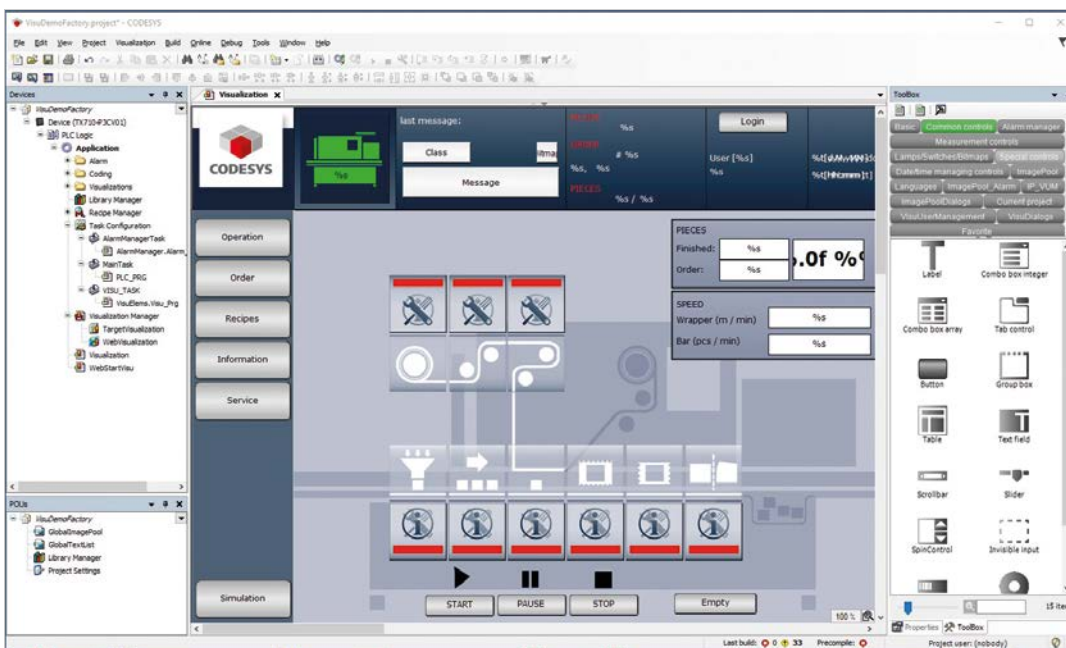
The CODESYS TargetVisu is the visualization that is shown and run locally on the touch screen of the TX operator panels. The integration of the visualization editor into the PLC programming environment ensures maximum efficiency by allowing the PLC programmer to create the visualization in a tool while also programming the controller.

WebVisu

The CODESYS WebVisu is built in a similar way to a TargetVisu. The web-based display variant allows remote access, remote monitoring, as well as service and diagnostics of a plant only with the help of a browser. The WebVisu can thus be easily used in addition to TargetVisu on PCs or mobile devices.

Internal visualization

The visualization pages can also be carried out within the CODESYS programming environment. This is a particularly useful feature in the context of programming and commissioning. Not only can variables and states be very easily observed, they can also be manipulated. This also applies for all visualization pages of the TargetVisu and WebVisu.



Basic elements	General controls	Input options	Special controls	Practical controls	Animation possibilities
Rectangles	Buttons	Keys	Trace	Pointer instruments	Text display
Ellipses	Tables	Toggling	ActiveX elements	Lamps	Color change
Curves	Scroll bars	Picture change	Waiting symbols	Switch	Visible/invisible
Polygons	Slider	Mouse-over	Text editors	Potentiometer	Operable/inactive
Bitmaps	Loading bar	Function calls	–	Bar graphs	Shift
Buttons	Radio buttons	–	–	–	Resizing
Frames	Check boxes	–	–	–	Rotation
Bezier curves	–	–	–	–	Character properties

TX VisuPro

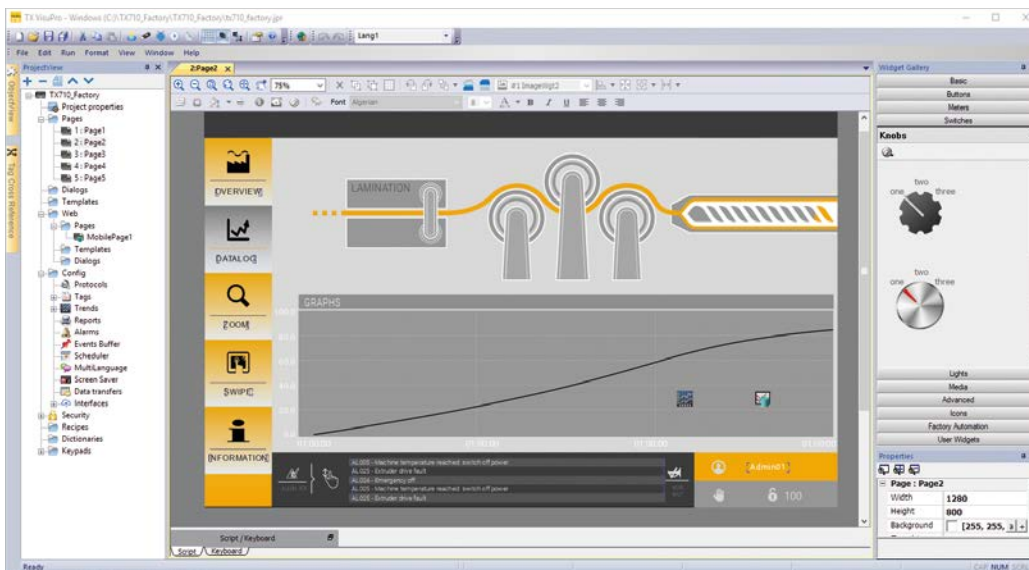
TX VisuPro is a modern development environment for the creation of contemporary, innovative, and user-friendly graphical user interfaces. TX VisuPro applications can communicate simultaneously with up to eight of the same or different controllers. Advanced features such as gesture control, scheduler, Java Scripting, IP cameras, emails, or audit trails can be generated quickly and intu-

itively according to your requirements. The HMI thereby becomes the show-piece of each machine and plant.

TX VisuPro is not licensed and can be downloaded free of charge at www.turck.de. Thanks to the integrated simulation mode, the creation and testing of a visualization is already possible without the available hardware.

Excerpt of the supported HMI protocols and controls:

- Siemens Simatic
- Phoenix Contact
- Allen-Bradley
- Beckhoff
- CODESYS (V2, V3)
- Mitsubishi
- Omron
- Modbus (TCP, RTU)
- CANopen
- OPC UA (Server, Client)



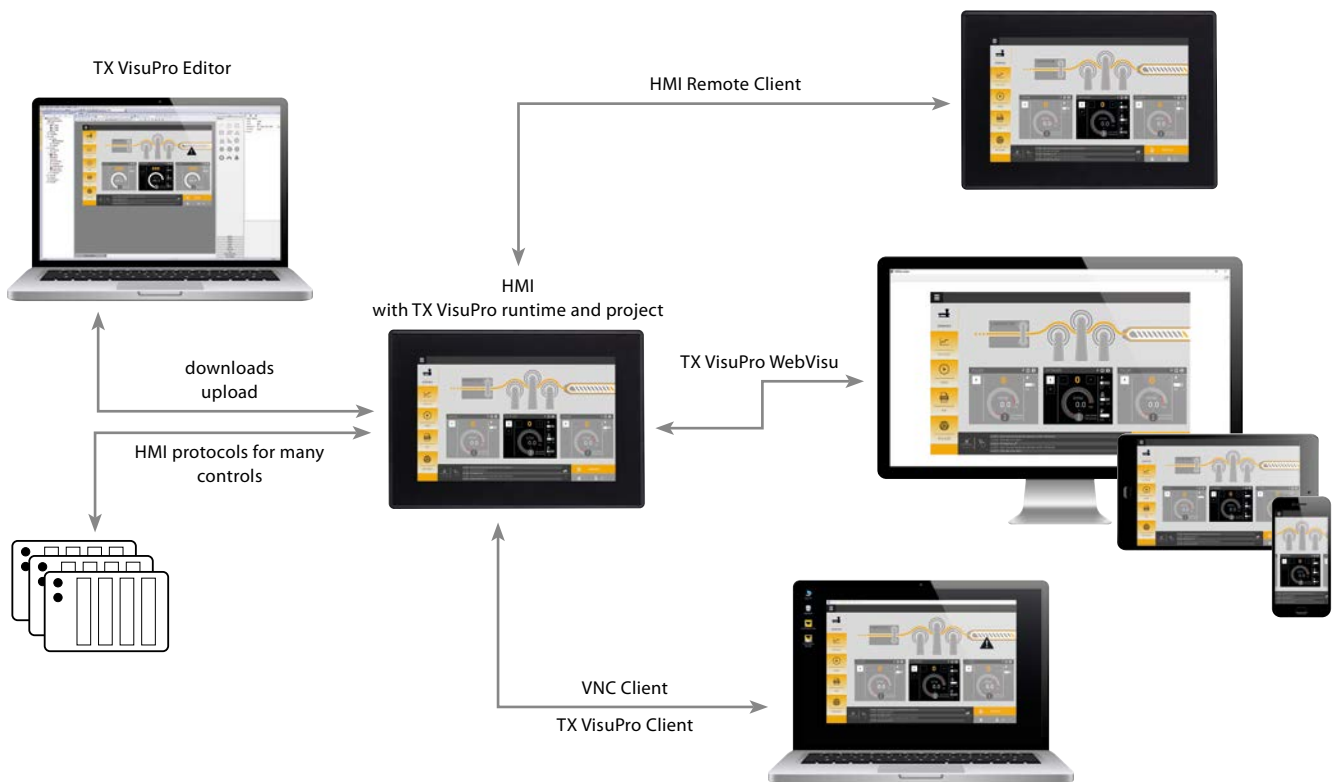
Basic elements	General controls	Input options	Special controls	Practical controls	Animation possibilities
Rectangles	Buttons	Keys	Trace	Pointer instruments	Text display
Ellipses	Tables	Toggling	Text editors	Lamps	Color change
Curves	Scroll bars	Picture change	Media player	Switch	Visible/invisible
Polygons	Slider	Mouse-over	Web controls	Potentiometer	Operable/inactive
Bitmaps	Loading bar	Function calls	IP camera	Bar graphs	Shift
Buttons	Radio buttons	Gesture control	Recipes	-	Resizing
Frames	Check boxes	Widget properties	Scheduler	-	Rotation
Bezier curves	Scales	-	Audit tables	-	Character properties
Rings/circles	-	-	Rotation menu	-	-
Icons	-	-	Send email	-	-
-	-	-	Alarm management	-	-
-	-	-	Recipe management	-	-
-	-	-	User administration	-	-

More options for visualization with TX VisuPro

The actual visualization is executed and shown in its native form on the runtime of the centrally displayed HMI. The visu-

alization with TX VisuPro offers yet even more opportunities and features for display and operation. The HMI device

can therefore also be accessed remotely in various ways. The figure offers a schematic overview for this.



HMI Remote Client

The HMI Remote Client is practically a twin of the central HMI with the TX VisuPro runtime, which acts as a server in this case. The Remote Client automatically loads the current version of the Visu application from the server during start-up and then executes it independently. The application can then be operated from both devices independently of each other, allowing different content to be accessed at the same time.

TX VisuPro WebVisu

TX VisuPro on the web enables access to all visualization pages that were created as a web type. This can also be other pages and content. This offers hardware-independent remote access via a web browser. All devices that feature an HTML5-enabled web browser, such as web panels, PCs or mobile devices such as tablets or smartphones, can be used for this purpose.

TX VisuPro Client/VNC Client

The TX VisuPro HMI Client is an independent windows application. The tool is part of the TX VisuPro setup and is automatically installed as part of it. The Client enables remote access to the native Visu application of the central HMI. The VNC Client enables full access to all the HMI settings. This is, for example, the ideal solution for remote maintenance and diagnosis of the control panel.

Turck Cloud Solutions for Industrial Use



There are plenty of cloud services for private and business users today, but hardly any of these address the specific requirements of industrial customers in the field of automation technology: Turck Cloud Solutions now offers a service that is precisely tailored to these industrial requirements and can be hosted locally or externally. The encrypted communication maximizes data security and additional functions such as data analysis or monitoring for production processes create real value for you as a user.



Hosted by Turck

Turck's hosted cloud helps you get set up quickly and cost-effectively. The Turck infrastructure can be used "as a service" (IaaS), eliminating the need for you to have your own data center or to perform your own maintenance and servicing.



Individually tailored solution

Take full advantage of the cloud, hosted by Turck, without sacrificing your own customizations. The Turck cloud portal can be flexibly tailored to your needs, so that you can adapt this to your own CD (corporate design) and share it with your customers.



Additional data for pre-processing

Turck Cloud Solutions generates additional data in sensors and fieldbus modules. These are pre-processed in the fieldbus modules using the Field Logic Controller (FLC) functionality and the ARGEE web-based programming environment.

What are the benefits?

- Wear and aging forecasts
- Protection against plagiarism and spare parts ordering
- Machine performance indicators
- No additional load on the controller

Added value for you!

- Higher plant availability
- Fast remote diagnostics
- Predictive maintenance



Individual and local cloud applications

Turck Cloud Solutions offers customized functions that are tailored to your specific automation applications.

What are the benefits?

- Scalable entry-level solution with high potential
- Hardware, cloud and service/support from a single source
- All data can be accessed worldwide at all times
- Can also be used with mobile devices

Added value for you!

- Easy entry into Industry 4.0
- Fast diagnostics
- Increased machine availability



Integration with established clouds

Turck Cloud Solutions and Turck products can be integrated not only with control architectures and network topologies, but also with third-party cloud solutions.

What are the benefits?

- Future-proof innovative products
- Security through standard protocols
- Cloud connectivity at any time

Added value for you!

- Flexible integration of the machines at the end customer's premises
- Openness to standards
- Long-term investment protection



User data with added value

Turck Cloud Solutions provides pure user data on various channels. This can be evaluated to create a digital shadow, regardless of the automation task.

What are the benefits?

- Continuous data analysis
- Creation of a digital shadow
- Traceability

Added value for you!

- Efficient system monitoring
- Quick fault diagnosis
- Identification of the optimization fields

EDGE Gateways

ID	Type designation	Type of protection		Ethernet ports	Mobile radio	Wi-Fi	Interfaces					Local I/Os				TCS		
		IP20	IP67				CAN	RS232/RS485	Profibus	USB Host Port	SD card	DI/DO	AI/AO	IO-Link	RFID	Technology	Turck Cloud Gateway	Chromium
PLC/EDGE controller																		
100009353	TX700S-P3WV01	✓	X	2	•	•	•	1	•	1	1	•	•	X	X	X	✓	X
100009354	TX700D-P3WV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	X
100009355	TX700Q-P3WV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	X
HMI/EDGE gateway																		
100002311	TX104-00VPST	✓	X	1	X	X	X	1	X	X	X	X	X	X	X	X	X	X
100002312	TX107-00VPST	✓	X	1	X	X	X	1	X	X	X	X	X	X	X	X	X	•
100002313	TX110-00VPST	✓	X	1	X	X	X	1	X	X	X	X	X	X	X	X	X	•
HMI/PLC/EDGE controller																		
100002080	TX207-P3CV01	✓	X	2	X	X	2	4	X	2	X	X	X	X	X	X	✓	•
100002029	TX705-P3CV01	✓	X	2	•	•	•	1	•	1	1	•	•	X	X	X	✓	•
100002030	TX707-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100002031	TX710-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100002032	TX715-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100002033	TX721-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100007471	TX707FB-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100007472	TX715FB-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100007473	TX707HB-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100007474	TX710HB-P3CV01	✓	X	3	•	•	•	1	•	2	1	•	•	X	X	X	✓	•
100017839	TXF705-00VPST	X	✓	1	X	X	X	X	X	•	X	X	X	X	X	X	•	•
100017841	TXF707-00VP20	X	✓	1	X	✓	X	X	X	•	X	X	X	X	X	X	•	•
100017845	TXF710-00VP20	X	✓	1	X	✓	X	X	X	•	X	X	X	X	X	X	•	•
100017847	TXF715-00VP20	X	✓	1	X	✓	X	X	X	•	X	X	X	X	X	X	•	•
100017849	TXF721-00VP20	X	✓	1	X	✓	X	X	X	•	X	X	X	X	X	X	•	•
PLC/EDGE controller																		
6814018	TBEN-L5-PLC-10	X	✓	2	X	X	1	2	X	✓	X	✓	X	X	X	X	✓	X
100000272	TBEN-L5-PLC-11	X	✓	2	X	X	1	2	X	✓	X	✓	X	X	X	X	✓	X
6814019	TBEN-L4-PLC-10	X	✓	2	X	X	1	2	X	✓	X	✓	X	X	X	X	✓	X
100000273	TBEN-L4-PLC-11	X	✓	2	X	X	1	2	X	✓	X	✓	X	X	X	X	✓	X
I/O System/EDGE controller																		
6827393	BL20-PG-EN-V3	✓	X	2	X	X	X	•	X	✓	X	•	•	•	•	•	✓	X
6827398	BL20-PG-EN-V3-WV	✓	X	2	X	X	X	•	X	✓	X	•	•	•	•	•	✓	X
6827394	BL67-PG-EN-V3	X	✓	2	X	X	•	•	X	✓	X	•	•	•	•	•	✓	X
100000041	BL67-PG-EN-V3-WV	X	✓	2	X	X	•	•	X	✓	X	•	•	•	•	•	✓	X

✓ = supported
 • = supported with extension
 X = not supported

	PLC Runtime	Target Visu	WebVisu	Profinet Device	Profinet Controller	EtherNet/IP Device	EtherNet/IP Scanner	Modbus TCP Client	Modbus TCP Server	EtherCAT Master	Modbus RTU Slave	Modbus RTU Master	CANopen Device	CANopen Manager	SAE-J1939	MQTT client	OPC-UA Server	OPC-UA Client	Target Visu	WebVisu	MQTT client	OPC-UA Server	OPC-UA Client	HMI protocols	
	CODESYS																		TX VisuPro						
	✓	✗	✓	✗	✓	✗	✓	✓	✓	✓	✓	✗	✗	✓	✓	•	✓	✗	✗	✓	✓	✓	✓	✓	
	✓	✗	✓	✗	✓	✗	✓	✓	✓	✓	✓	✗	✗	✓	✓	•	✓	✗	✗	✓	✓	✓	✓	✓	✓
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	•	•	•	✗	•	✗	•	•	•	✗	✗	✗	✗	✗	✗	•	•	✗	✓	✓	✓	✓	✓	✓	✓
	•	•	•	✗	•	✗	•	•	•	✗	✗	✗	✗	✗	✗	•	•	✗	✓	✓	✓	✓	✓	✓	✓
	•	•	•	✗	•	✗	•	•	•	✗	✗	✗	✗	✗	✗	•	•	✗	✓	✓	✓	✓	✓	✓	✓
	•	•	•	✗	•	✗	•	•	•	✗	✗	✗	✗	✗	✗	•	•	✗	✓	✓	✓	✓	✓	✓	✓
	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•	✓	✓	✗	✗	✗	✗	✗	✗	✗
	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•	✓	✓	✗	✗	✗	✗	✗	✗	✗
	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•	✓	✓	✗	✗	✗	✗	✗	✗	✗
	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•	✓	✓	✗	✗	✗	✗	✗	✗	✗

TX100 Series



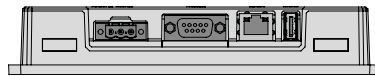
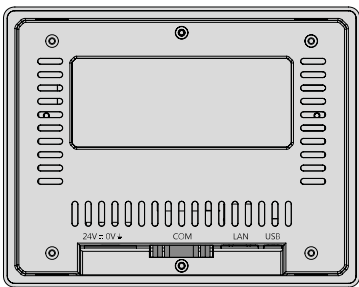
The HMIs of the TX100 product series include three devices with resistive touch display with screen diagonals of 4", 7", or 10". The high-quality plastic housing and the reduced number of interfaces offer an optimal price/performance ratio in cost-sensitive applications. The devices have one Ethernet interface, a serial interface (RS232, RS422 or RS485) and a USB port. The TX100 devices are pure operator interfaces without control function and, like all TX devices, can be easily connected to almost all control-

lers by means of protocol support. Alternatively, the panels can also be used as a web panel.

Areas of application

- HMI panel
- Web panel

Interfaces:



Type code

TX 1 07 - 00 VP ST

TX Product series **1** Series **04** Screen diagonals

Product series
TX Turck HMI

Series
1 TX100 series

Size
04 4.3"
07 7"
10 10.1"

00 PLC **VP** Visualization **ST** Communication

PLC
00 HMI without PLC functionality

Visualization
VP TX VisuPro Runtime

Communication
ST Standard HMI protocols

TX207



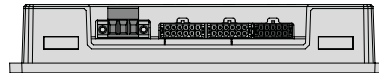
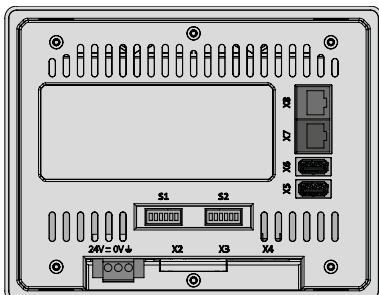
The TX207 combines the high-quality plastic housing of the TX100 series with a much more powerful hardware platform. The resistive touchscreen has a screen diagonal of 7". The TX207 has sufficient memory and computing power, and is equipped with a real-time Linux operating system. Therefore, the main application area for this HMI is on the integrated control functionality, and the programming is carried out with CODESYS V3. Numerous interfaces are already on board for the connection of

I/Os, drives, and field devices. The TX207 has two Ethernet ports, two RS232 and two RS485, as well as two CAN interfaces and USB host ports.

Areas of application

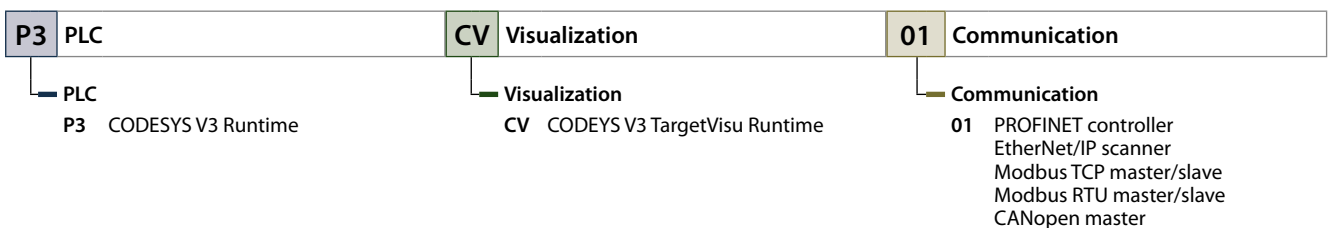
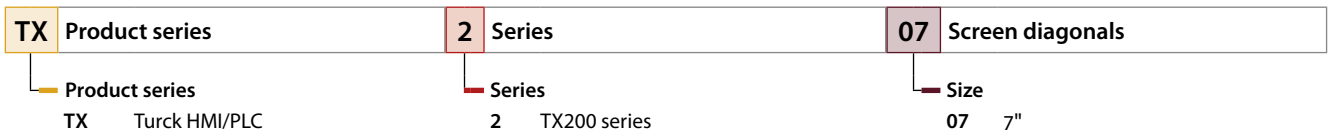
- Control
- HMI panel
- Web panel

Interfaces:



Type code

TX 2 07 - P3 CV 01



TX100 | TX207 Technical Features



Type designation	TX104-00VPST	TX107-00VPST
Ident.-No.	100002311	100002312
Display/touch		
Display	TFT color	TFT color
Touch	Resistive	Resistive
Active screen area	4.3"	7"
Resolution (pixels)	480 × 272	800 × 480
Format	16:9	16:9
Brightness	200 Cd/m ² typ.	200 Cd/m ² typ.
Dimmable	Yes	Yes
System		
Processor	ARM Cortex A8, 300 MHz	ARM Cortex A8, 1 GHz
Flash memory	2048 MB	4096 MB
RAM memory	256 MB	512 MB
Memory expansion	USB	USB
Real-time clock	-	-
Buzzer	-	-
PLC data		
Programming	-	-
Programming languages	-	-
Programming interfaces	-	-
Program memory	-	-
Retain memory	-	-
Interfaces		
Ethernet ports	1 × 10/100 Mbit	1 × 10/100 Mbit
Serial ports	1 × (RS232/RS485/RS422, configurable)	1 × (RS232/RS485/RS422, configurable)
USB ports	1 × host v.2.0, max. 500 mA	1 × host v.2.0, max. 500 mA
SD card	-	-
Expansion slot	-	-
Power supply		
Rated value	24 VDC, max. 0.25 A	24 VDC, max. 0.3 A
Permissible voltage range	18...32 VDC	10...32 VDC
General data		
Operation temperature	0...50 °C	0...50 °C
Approvals	CE, cULus	CE, cULus
Ex approval	UL Class 1 Div. 2	UL Class 1 Div. 2
Protection type	IP66 front, IP20 rear	IP66 front, IP20 rear
Dimensions		
Housing front (W x H)	147 × 107 mm	187 × 147 mm
Installation cutout (W x H)	136 × 96 mm	176 × 136 mm
Mounting depth	29 mm	29 mm
Weight	320 g	540 g



Product images are linked to further information.



TX110-00VPST	TX207-P3CV01
100002313	100002080
TFT color	TFT color
Resistive	Resistive
10.1"	7"
1024 × 600	800 × 480
16:9	16:9
200 Cd/m ² typ.	200 Cd/m ² typ.
Yes	Yes
ARM Cortex A8, 1 GHz	ARM Cortex A9, Dual Core 800 MHz
4096 MB	4096 MB
512 MB	1024 MB
USB	USB
-	Yes (battery-backed)
-	-
-	CODESYS V3
-	IEC 61131-3 (IL, LD, FBD, SFC, ST)
-	Ethernet
-	20 MB
-	63 kB
1 × 10/100 Mbit	2 × 10/100 Mbit
1 × (RS232/RS485/RS422, configurable)	2 × (RS232), 2 × (RS422/RS485), 2 × (CAN)
1 × host v.2.0, max. 500 mA	2 × host v.2.0, max. 100 mA
-	-
-	-
24 VDC, max. 0.38 A	24 VDC, max. 0.3 A
10...32 VDC	10...32 VDC
0...50 °C	0...50 °C
CE, cULus	CE, cULus
UL Class 1 Div. 2	-
IP66 front, IP20 rear	IP66 front, IP20 rear
282 × 197 mm	187 × 147 mm
271 × 186 mm	176 × 136 mm
29 mm	29 mm
900 g	560 g



Product images are linked to further information.

TX700 Series



The innovative designs of the TX700 series HMI/PLC panels make them truly impressive. The panels of the Premium Line improve the high quality metal housings with a redesigned front with capacitive glass display. Panels are available with screen diagonals from 5" to 21". The panels now also feature up to three Ethernet ports, which can be used independently for different applications. It is thereby also possible to turn the panels into a universal IoT platform. Remote maintenance and remote access can be quickly and easily achieved with

the integrated VNC Server. The PLC programming is freely available via CODESYS V3, the graphical user interface can be created with the visualization editor in CODESYS, or optionally with TX VisuPro.

Areas of application

- Control
- HMI panel
- Multi-touch and gesture control
- IoT gateway
- Extended temperature range of -20...60 °C

Variants for the food industry and extreme environments

The TX700 series now also offers two variants for food and beverage applications (TX700FB, Food&Beverage) and two variants with high brightness displays for improved sunlight readability (TX700HB, High Brightness).

The blue front of the F&B variants (7" and 15") has a stainless steel frame and is fully covered with a polyester coating.

This protects the glass front also in the event of possible glass breakage and complies with the requirements of all hygiene regulations.

- Regulations for front and sealing: - DIN EN1672-2 - EHEDG/FDA 21 CFR 177.2006
- Front protection type: IP69
- Resistant to high pressure water, 80 °C

The TX700HB (High Brightness) versions use a special technology called liquid bonding (LOCA) to ensure good sunlight readability. LOCA also helps in humid environments. This screen enhancement process improves contrast and brightness (up to 800 candela) by reducing reflection and refraction.

Gesture control via TX VisuPro

The glass front of the TX700 operator panels with capacitive touch supports multi-touch and gesture control functionality. The gestures can be flexibly configured in the TX VisuPro visualization editor. A predefined object, also known as a widget, defines the area of the display the gesture is to be recog-

nized and which action is to be subsequently performed. Modern operating concepts can thereby quickly and flexibly be adapted to the requirements of the individual machine or system. Below is an overview of the typical gestures.

Plug-in modules

The TX700 panels can also be expanded with functions, interfaces, and local I/O signals via plug-in modules. The concept has been adopted from the TX500 panel series. The same plug-in modules can be used.

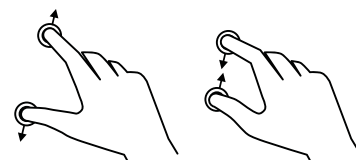
Swipe



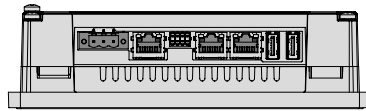
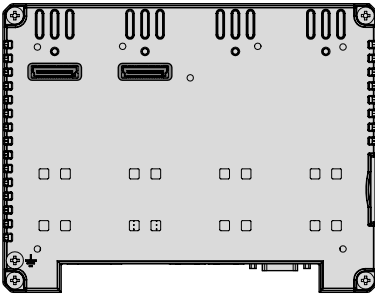
Rotate



Zoom



Interfaces:



Type code

TX 7 05 FB - P3 CV 01

TX Product series **7** Series **05** Screen diagonal

Product series
TX Turck HMI/PLC

Series
7 TX700 series

Size
00 Without display
05 5"
07 7"
10 10.1"
15 15.6"
21 21.5"

FB Variant - **P3** PLC **CV** Visualization

Variant
Blank Standard
FB Food & Beverage
HB High Brightness
S Single Core
D Dual Core
Q Quad Core

PLC
P3 CODESYS V3 PLC Runtime

Visualization
CV CODESYS V3 TargetVisu Runtime
WV WebVisu (CODESYS, TX VisuPro)

01 Communication

Communication
01 PROFINET controller
EtherNet/IP scanner
Modbus TCP master/slave
Modbus RTU master/slave
CANopen master

Technical Features TX700



Type designation	TX705-P3CV01	TX707-P3CV01
ID	100002029	100002030
Display/touch		
Display	TFT color	TFT color
Touch	Capacitive	Capacitive
Active screen area	5"	7"
Resolution (pixels)	800 × 480	800 × 480
Format	16 : 9	16 : 9
Brightness	300 Cd/m ² typ.	500 Cd/m ² typ.
Dimmable	Yes (up to 0%)	Yes (up to 0%)
System		
Processor	ARM Cortex A8, 1 GHz	ARM Cortex A9, Dual Core 800 MHz
Flash memory	4096 MB	4096 MB
RAM memory	512 MB	1024 MB
Memory expansion	USB, SD card	USB, SD card
Real-time clock	Yes (battery-backed)	Yes (battery-backed)
Buzzer	-	-
PLC data		
Programming	CODESYS V3	CODESYS V3
Programming languages	IEC 61131-3 (IL, LD, FBD, SFC, ST)	IEC 61131-3 (IL, LD, FBD, SFC, ST)
Programming interfaces	Ethernet	Ethernet
Program memory	20 MB	20 MB
Retain memory	63 kB	63 kB
Interfaces		
Ethernet ports	2 × 10/100 Mbit	3 × 10/100 Mbit
Serial ports	1 × (RS232/RS485/RS422, configurable)	1 × (RS232/RS485/RS422, configurable)
USB ports	1 × host v.2.0, max. 500 mA	2 × host v.2.0, max. 500 mA
SD card	Yes	Yes
Expansion slot	1 × plug-in slot	2 × plug-in slots
Power supply		
Rated value	24 VDC, max. 0.6 A	24 VDC, max. 0.7 A
Permissible voltage range	10...32 VDC	10...32 VDC
General data		
Operation temperature	-20...60 °C	-20...60 °C
Approvals	CE, cULus, DNV-GL, LR	CE, cULus, DNV-GL, LR
Ex approval	UL Class 1 Div. 2, ATEX, IEC Ex	UL Class 1 Div. 2, ATEX, IEC Ex
Protection type	IP66 front, IP20 rear	IP66 front, IP20 rear
Dimensions		
Housing front (W x H)	147 × 107 mm	187 × 147 mm
Installation cutout (W x H)	136 × 96 mm	176 × 136 mm
Mounting depth	52 mm	47 mm
Weight	800 g	1100 g



Product images are linked to further information.



TX710-P3CV01	TX715-P3CV01	TX721-P3CV01
100002031	100002032	100002033
TFT color	TFT color	TFT color
Capacitive	Capacitive	Capacitive
10.1"	15.6"	21.5"
1280 × 800	1366 × 768	1920 × 1080
16 : 9	16 : 9	16 : 9
500 Cd/m ² typ.	400 Cd/m ² typ.	300 Cd/m ² typ.
Yes (up to 0%)	Yes (up to 0%)	Yes (up to 0%)
ARM Cortex A9, Dual Core 800 MHz	ARM Cortex A9, Quad Core 800 MHz	ARM Cortex A9, Quad Core 800 MHz
4096 MB	8192 MB	8192 MB
1024 MB	2048 MB	2048 MB
USB, SD card	USB, SD card	USB, SD card
Yes (battery-backed)	Yes (battery-backed)	Yes (battery-backed)
-	-	-
CODESYS V3	CODESYS V3	CODESYS V3
IEC 61131-3 (IL, LD, FBD, SFC, ST)	IEC 61131-3 (IL, LD, FBD, SFC, ST)	IEC 61131-3 (IL, LD, FBD, SFC, ST)
Ethernet	Ethernet	Ethernet
20 MB	20 MB	20 MB
63 kB	63 kB	63 kB
3 × 10/100 Mbit	3 × 10/100 Mbit	3 × 10/100 Mbit
1 × (RS232/RS485/RS422, configurable)	1 × (RS232/RS485/RS422, configurable)	1 × (RS232/RS485/RS422, configurable)
2 × host v.2.0, max. 500 mA	2 × host v.2.0, max. 500 mA	2 × host v.2.0, max. 500 mA
Yes	Yes	Yes
2 × plug-in slots	2 × plug-in slots	2 × plug-in slots
24 VDC, max. 1.0 A	24 VDC, max. 1.2 A	24 VDC, max. 1.7 A
10...32 VDC	10...32 VDC	10...32 VDC
-20...60 °C	-20...60 °C	-20...60 °C
CE, cULus, DNV-GL, LR	CE, cULus, DNV-GL, LR	CE, cULus, DNV-GL, LR
UL Class 1 Div. 2, ATEX, IEC Ex	UL Class 1 Div. 2, ATEX, IEC Ex	UL Class 1 Div. 2, ATEX, IEC Ex
IP66 front, IP20 rear	IP66 front, IP20 rear	IP66 front, IP20 rear
282 × 197 mm	422 × 267 mm	552 × 347 mm
271 × 186 mm	411 × 256 mm	541 × 336 mm
56 mm	56 mm	56 mm
1800 g	3500 g	6100 g



Product images are linked to further information.

Technical Features TX700FB and TX700HB



Type code	TX707FB-P3CV01	TX715FB-P3CV01
ID	100007471	100007472
Display/touch		
Display	TFT color	TFT color
Touch	Capacitive	Capacitive
Active screen area	7"	15.6"
Resolution (pixels)	800 × 480	1366 × 768
Format	16 : 9	16 : 9
Brightness	500 Cd/m ² typ.	400 Cd/m ² typ.
Dimmable	Yes (up to 0 %)	Yes (up to 0 %)
System		
Processor	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 quad core 800 MHz
Flash memory	4 GB	8 GB
RAM memory	1 GB	2 GB
Memory expansion	USB, SD card	USB, SD card
Real-time clock	Yes (battery-backed)	Yes (battery-backed)
Buzzer	Yes	Yes
PLC data		
Programming	CODESYS V3	CODESYS V3
Programming languages	IEC 61131-3 (IL, LD, FBD, SFC, ST)	IEC 61131-3 (IL, LD, FBD, SFC, ST)
Programming interfaces	Ethernet	Ethernet
Program memory	20 MB	20 MB
Non-volatile memory	63 Kbyte	63 Kbyte
Interfaces		
Ethernet ports	3 × 10/100 Mbit	3 × 10/100 Mbit
Serial ports	1 × (RS232/RS485/RS422, configurable)	1 × (RS232/RS485/RS422, configurable)
USB ports	2 × Host v2.0, max. 500 mA	2 × Host v2.0, max. 500 mA
SD card	Yes	Yes
Expansion slot	2 × plug-in slots	2 × plug-in slots
Power supply		
Rated value	24 VDC, 0.7 A maximum	24 VDC, 1.2 A maximum
Permissible voltage range	10...32 VDC	10...32 VDC
General data		
Operating temperature	-20...+60 °C	-20...+60 °C
Approvals	CE, cULus	CE, cULus
EX approval	-	-
Protection type	IP69K (front), IP20 (rear)	IP69K (front), IP20 (rear)
Dimensions		
Housing front (W x H)	217 × 177 mm	450 × 295 mm
Installation cutout (W x H in mm)	176 × 136 mm	411 × 256 mm
Mounting depth (D in mm)	45 + 10 mm	56 + 8 mm
Weight	2.5 kg	5.2 kg



Product images are linked to further information.



TX707HB-P3CV01

100007473

TFT color

Capacitive

7"

800 × 480

16:9

600 Cd/m²

Yes (up to 0 %)

ARM Cortex-A9 dual core 800 MHz

4 GB

1 GB

USB, SD card

Yes (battery-backed)

Yes

CODESYS V3

IEC 61131-3 (IL, LD, FBD, SFC, ST)

Ethernet

20 MB

63 Kbyte

3 × 10/100 Mbit

1 × (RS232/RS485/RS422, configurable)

2 × Host v2.0, max. 500 mA

Yes

2 × plug-in slots

24 VDC, 0.7 A maximum

10...32 VDC

-20...+60 °C

CE, cULus

UL Class I Div. 2

IP66 (front), IP20 (rear)

187 × 147 mm

176 × 136 mm

47 + 8 mm

1.5 kg

TX710HB-P3CV01

100007474

TFT color

Capacitive

10.1"

1280 × 800

16:9

800 Cd/m² typ.

Yes (up to 0 %)

ARM Cortex-A9 dual core 800 MHz

4 GB

1 GB

USB, SD card

Yes (battery-backed)

Yes

CODESYS V3

IEC 61131-3 (IL, LD, FBD, SFC, ST)

Ethernet

20 MB

63 Kbyte

3 × 10/100 Mbit

1 × (RS232/RS485/RS422, configurable)

2 × Host v2.0, max. 500 mA

Yes

2 × plug-in slots

24 VDC, 1.0 A maximum

10...32 VDC

-20...+60 °C

CE, cULus

UL Class I Div. 2

IP66 (front), IP20 (rear)

282 × 197 mm

271 × 168 mm

56 + 8 mm

2.5 kg



Product images are linked to further information.

TX700 IIoT Edge Controller and CODESYS PLC



The IIoT edge controllers of the TX700 series form the link between the conventional automation devices such as PLCs or IO-Link masters and the IIoT applications such as cloud services. They are thus a central element of the IIoT infrastructure. The gateways can be used here as a PLC with CODESYS V3, as a secure router or a powerful HMI with WebVisu and many HMI protocols for all standard controllers. The OT and IT networks are physically separated with individual Ethernet ports to ensure max-

imum security. Secure HTTPS/TLS-encrypted data transfers with signatures and packet transmission provide protection from data theft and snooping. The VNC server allows swift and easy implementation of remote maintenance and remote access tasks.

Application areas

- Controller
- IIoT gateway

CODESYS v3 PLC

The TX700 IIoT gateways can also be used as conventional IP20 PLCs with CODESYS v3 control and WebVisu. The devices come factory shipped with all the necessary licenses and the several master and slave functions available.

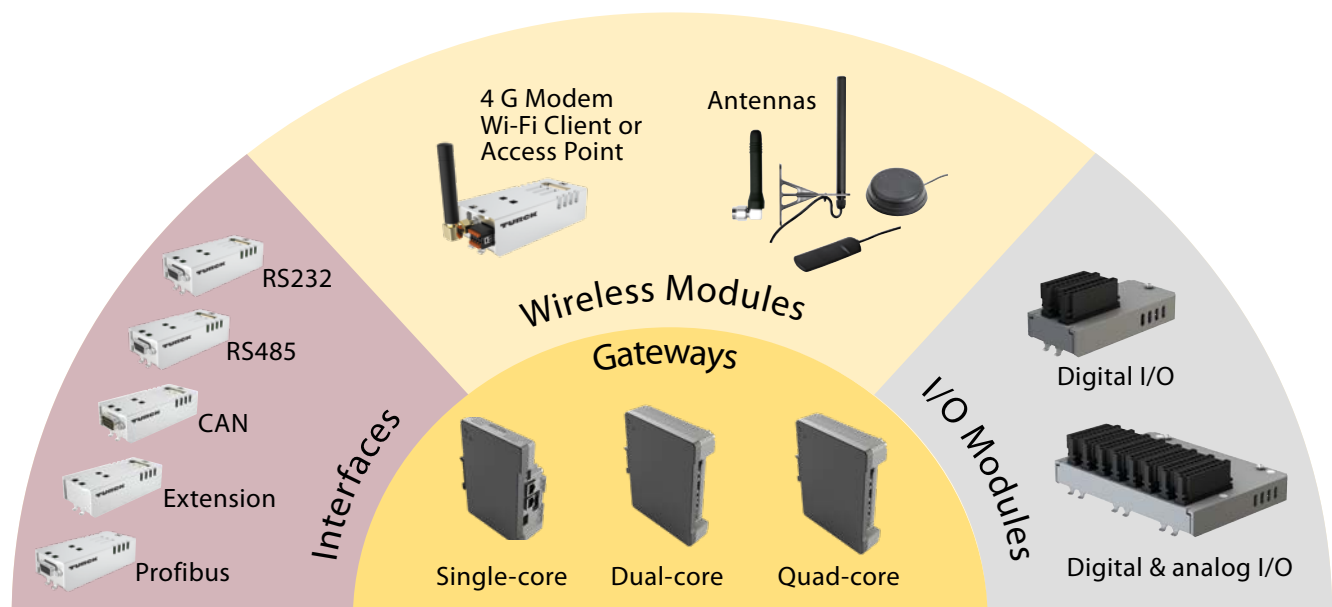
TX VisuPro

Alternatively, the CODESYS visualization can also be replaced with a TX VisuPro runtime at no additional cost. This makes it possible to access the extensive protocol library including the OPC UA server, client and MQTT.

Plug-in modules

Plug-in modules also make it possible to provide TX700 devices with additional functions, interfaces and local I/O signals. The same concept is available with the TX500 device series. The same plug-in modules can therefore also be used here.

Modular and future-proof IIoT concept



Technical Features TX700 IIoT Gateways



Type code	TX700S-P3WV01	TX700D-P3WV01
ID.	100009353	100009354
Display/touch		
Display	No display	No display
Visualization	CODESYS or TX VisuPro WebVisu	CODESYS or TX VisuPro WebVisu
System		
Processor	ARM Cortex A8, 1 GHz	ARM Cortex A9, Dual Core 800 MHz
Flash memory	4 GB	4 GB
RAM memory	512 MB	1 GB
Memory expansion	USB, SD card	USB, SD card
Real-time clock	Yes (battery-backed)	Yes (battery-backed)
Buzzer	Yes	Yes
PLC data		
Programming	CODESYS V3	CODESYS V3
Programming languages	IEC 61131-3 (IL, LD, FBD, SFC, ST)	IEC 61131-3 (IL, LD, FBD, SFC, ST)
Programming interfaces	Ethernet	Ethernet
Program memory	20 MB	20 MB
Non-volatile memory	63 Kbyte	63 Kbyte
Interfaces		
Ethernet ports	2 × 10/100 Mbit	3 × 10/100 Mbit
Serial ports	1 × (RS232/RS485/RS422, configurable)	1 × (RS232/RS485/RS422, configurable)
USB ports	1 × Host v2.0, max. 500 mA	2 × Host v2.0, max. 500 mA
SD card	Yes	Yes
Expansion slot	1 × plug-in slot	2 × plug-in slots
Power supply		
Rated value	24 VDC, 0.35 A maximum	24 VDC, 0.5 A maximum
Permissible voltage range	10...32 VDC	10...32 VDC
General data		
Operating temperature	-20...60 °C	-20...60 °C
Approvals	CE, cULus	CE, cULus
EX approval	UL Class I Div. 2, (ATEX and IECEx in preparation)	UL Class I Div. 2, (ATEX and IECEx in preparation)
Protection type	IP20	IP20
Dimensions		
Housing (H x D)	134 × 102 mm	174 × 144 mm
Width on DIN rail (W)	45 mm	44 mm
Weight	0.56 kg	0.65 kg



Product images are linked to further information.



TX700Q-P3WV01

100009355

No display

CODESYS or TX VisuPro WebVisu

ARM Cortex A9, Quad Core 800 MHz

8 GB

2 GB

USB, SD card

Yes (battery-backed)

Yes

CODESYS V3

IEC 61131-3 (IL, LD, FBD, SFC, ST)

Ethernet

20 MB

63 Kbyte

3 x 10/100 Mbit

1 x (RS232/RS485/RS422, configurable)

2 x Host v2.0, max. 500 mA

Yes

2 x plug-in slots

24 VDC, 0.55 A maximum

10...32 VDC

-20...60 °C

CE, cULus

UL Class I Div. 2, (ATEX and IECEx in preparation)

IP20

174 x 144 mm

44 mm

0.65 kg



Product images are linked to further information.

TXF700 Product Series



The TXF700 series of operator panels offers complete all-round IP67 protection, enabling new, highly flexible and slim mounting concepts with a modern HMI platform. The brilliant displays are protected by a robust glass front and equipped with a capacitive touchscreen. The touchscreen has multi-touch capability and supports gesture control. In this way, modern operating concepts from the world of smartphones and tablets can be transferred to today's harsh world of industrial automation.

When esthetics and functionality come together, the market is transformed!

Areas of application

- Operating device
- Web panel
- Controller (optional)

TX VisuPro

In terms of the application area of TXF700 HMI devices, the focus is on pure HMI applications without CODESYS control. The visualization software TX VisuPro is therefore the primary software tool. This allows access to the extensive protocol library including OPC UA, client and MQTT servers. With the integrated Java Script Editor, you can also create programs directly in TX VisuPro, allowing you to map logic.

CODESYS v3 PLC

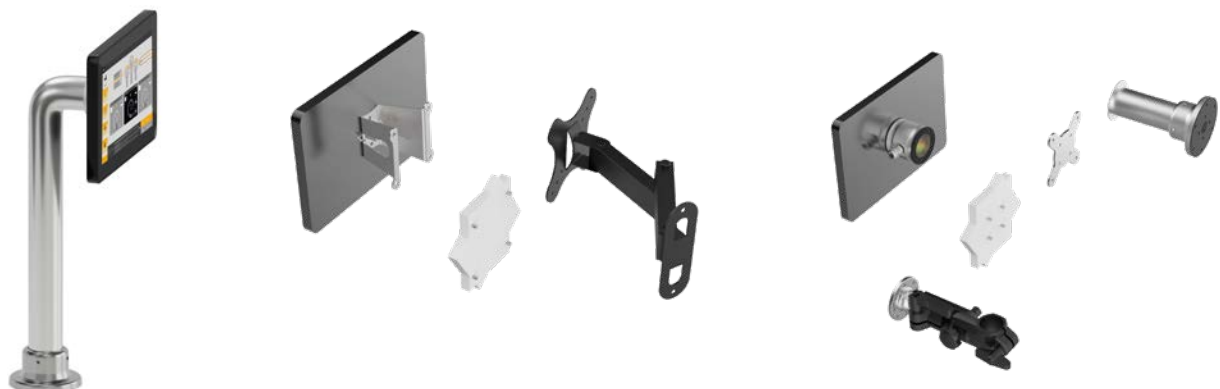
Alternatively, a CODESYS runtime can be installed on the TXF700 HMIs. However, an additional paid license is required for this, which is not included with the device. In this case, it is up to the user to decide whether they use the CODESYS' own TargetVisu and WebVisu or whether TX VisuPro should also be used here.

Installation

No switch cabinets or switch boxes are required to mount the IP67-protected TXF700 operator panels. With the extensive mounting accessories, the TXF700 can be installed directly on the machine or in the system where entries are made or information needs to be available.

- Installation on support arm systems with a pipe diameter of 48 mm
- Classic swivel arm solutions

Application examples for mounting concepts

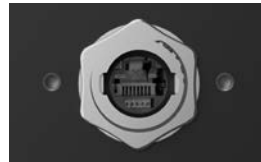


Interfaces

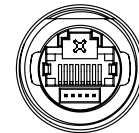


Interfaces

- 10/100 Mbit PoE Ethernet port
- USB interface



PoE cable lengths can reach up to 100 m



A special M22 PoE cable with an additional USB port is required to connect to the USB interface.

Wi-Fi interface

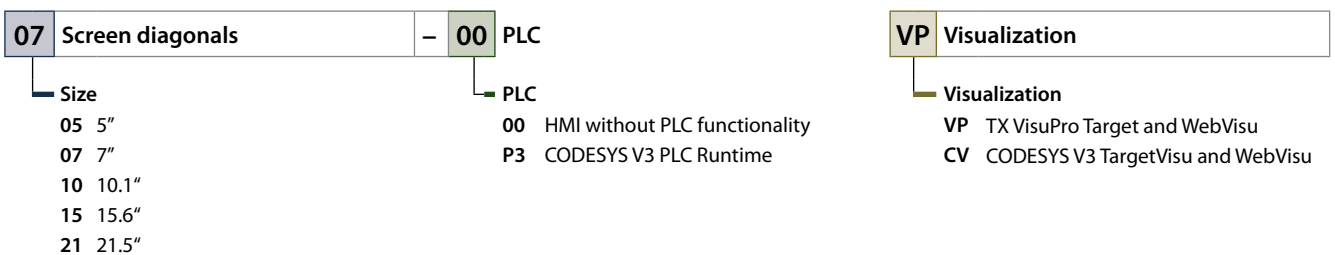
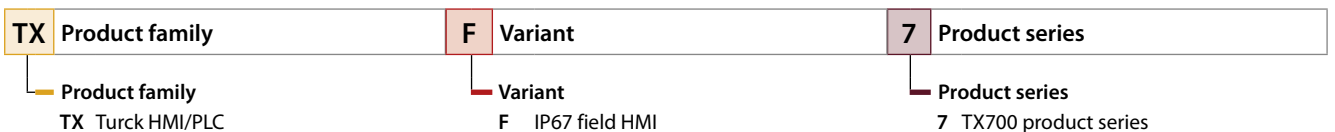
The TXF700 devices (except TXF705) have an integrated Wi-Fi interface. This allows the devices to integrate into a Wi-Fi network as a client or to set up their own Wi-Fi as an access point.

Integrated sensors

TXF700 operator panels include both environmental and motion sensors. This means, for example, that tilt and vibration can be recorded and evaluated directly from the TXF700.

Type code

TX F 7 07 - 00 VP 20



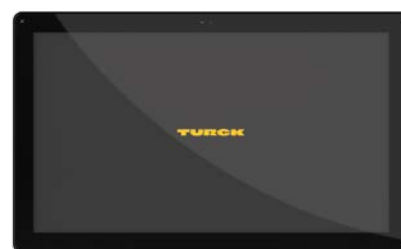
TXF700 Technical Data



Type designation	TXF705-00VPST	TXF707-00VP20
ID	100007839	100007841
Display/touch		
Display	TFT color	TFT color
Touch	Capacitive	Capacitive
Active screen area	5"	7"
Resolution (pixels)	800 × 480	1024 × 600
Format	16 : 9	16 : 9
Brightness	300 Cd/m ² typ.	400 Cd/m ² typ.
Dimmable	Yes (up to 0 %)	Yes (up to 0 %)
System		
Processor	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 dual core 800 MHz
Flash memory	4 GB	4 GB
RAM	1 GB	1 GB
Memory expansion	USB	USB
Real-time clock	Yes (battery-backed)	Yes (battery-backed)
Buzzer	Yes	Yes
Front LED	RGB	RGB
Integrated sensors	Vibration/tilt angle	Vibration/tilt angle
Interfaces		
Ethernet ports	1 × 10/100 Mbit (PoE)	1 × 10/100 Mbit (PoE)
Serial ports	–	–
USB ports	1 × host v2.0 (special cable required)	1 × host v2.0 (special cable required)
SD Card	–	–
Expansion slot	–	–
Wi-Fi		
Wi-Fi standards	–	IEEE 802.11a/b/g
Frequency	–	2.4 GHz
Modes	–	Wi-Fi Access Point & Client
Power supply		
PoE standard	IEEE 802.3af (PoE)	IEEE 802.3af (PoE)
Power consumption	≤ 6 W	≤ 9 W
General data		
Operating temperature	-20...+55 °C	-20...+55 °C
Approvals	CE, cULus	CE, cULus
Ex approval	UL Class 1 Div. 2	UL Class 1 Div. 2
Type of protection	IP67	IP67
Dimensions		
Housing front (W × H × D)	148.3 × 105.1 × 16.5 mm	195.2 × 131.6 × 16.5 mm
Weight	500 g	700 g



Product images are linked to further information.









TXF710-00VP20	TXF715-00VP20	TXF721-00VP20
100007845	100017847	100017849
TFT color	TFT color	TFT color
Capacitive	Capacitive	Capacitive
10.1"	15.6"	21.5"
1280 × 800	1366 × 768	1920 × 1080
16 : 9	16 : 9	16 : 9
400 Cd/m ²	400 Cd/m ² typ.	400 Cd/m ² typ.
Yes (up to 0 %)	Yes (up to 0 %)	Yes (up to 0 %)
ARM Cortex-A9 dual core 800 MHz	ARM Cortex A9 quad core 800 MHz	ARM Cortex-A9 quad core 800 MHz
4 GB	8 GB	8 GB
1 GB	2 GB	2 GB
USB	USB	USB
Yes (battery-backed)	Yes (battery-backed)	Yes (battery-backed)
Yes	Yes	Yes
RGB	RGB	RGB
Vibration/tilt angle	Vibration/tilt angle	Vibration/tilt angle
1 × 10/100 Mbit (PoE)	1 × 10/100 Mbit (PoE)	1 × 10/100 Mbit (PoE)
-	-	-
1 × host v2.0 (special cable required)	1 × host v2.0 (special cable required)	1 × host v2.0 (special cable required)
-	-	-
-	-	-
IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g
2.4 GHz	2.4 GHz	2.4 GHz
Wi-Fi Access Point & Client	Wi-Fi Access Point & Client	Wi-Fi Access Point & Client
IEEE 802.3af (PoE)	IEEE 802.3at (PoE+)	IEEE 802.3bt (4PPoE)
≤ 12 W	≤ 19 W	≤ 32 W
-20...+55 °C	-20...+55 °C	-20...+55 °C
CE, cULus	CE, cULus	CE, cULus
UL Class 1 Div. 2	UL Class 1 Div. 2	UL Class 1 Div. 2
IP67	IP67	IP67
264.5 × 183.1 × 16.5 mm	398.6 × 248 × 26.5 mm	534.1 × 325.6 × 26.5 mm
1200 g	4000 g	6000 g








Product images are linked to further information.

TXF700 Mounting Accessories

Figure	ID	Type designation	Description	Use
	100020090	TXF-MT-01	Pipe support	TXF705 TXF707 TXF710
	100020091	TXF-MT-02	Pipe support on the HMI Wall or floor flange	TXF715 TXF721 All TXF700
	100020092	TXF-MT-03	Wall bracket	TXF705 TXF707 TXF710
	100020093	TXF-MT-04	Wall bracket	TXF715 TXF721
	100022475	TXF-MT-05	Multipurpose bracket with PG9 cable gland	TXF705 TXF707 TXF710
	100022477	TXF-MT-06	Multipurpose bracket with PG9 cable gland	TXF715 TXF721



Product images are linked to further information.

Figure	ID	Type designation	Description	Use
	100020096	TXF-MV-01	VESA bracket	All TXF700
	100020097	TXF-MV-02	VESA adapter plate	All TXF700
	100020098	TXF-TABLE-01	Table stand	All TXF700
	100020094	TXF-MG-01	Gooseneck mount	TXF705 TXF707 TXF710
	100020103	TXF-M22-TOOL	Mounting tool for M22 PoE cables	All TXF700



Product images are linked to further information.

TXF700 Accessories





Figure	ID	Type designation	Description	Use
	100017850	PSU20-PoE-36W01	PoE injector (DIN rail), RJ45 Ethernet input, RJ45 PoE output, 36 W maximum PoE output power	All TXF700
	100017852	PSU20-PoE-36W02	PoE injector (M22 flange for IP67 connection), RJ45 Ethernet input, M22 PoE output, 36 W maximum PoE output power	All TXF700

CODESYS license

	ID	Type designation	Description	Use
	100029333	TX-CDS3-RT-LIC-01	CODESYS runtime license for TX700 devices, PLC, TargetVisu and WebVisu	All TXF700



Product images are linked to further information.

Figure	ID	Type designation	Description	Use
	100020099	TXF-M22W-RJ45-5M	PoE connection cable, M22 angled to RJ45, 5 m	All TXF700
	100020100	TXF-M22G-RJ45-5M	PoE connection cable, M22 straight to RJ45, 5 m	All TXF700
	100020101	TXF-M22G-RJ45-5M-USB-1M	PoE connection cable, M22 straight to RJ45, 5 m, USB drop line/spur 1 m	All TXF700
	100020102	TXF-M22G-M22G-5M	PoE connection cable, M22 straight to M22 straight, 5 m	All TXF700



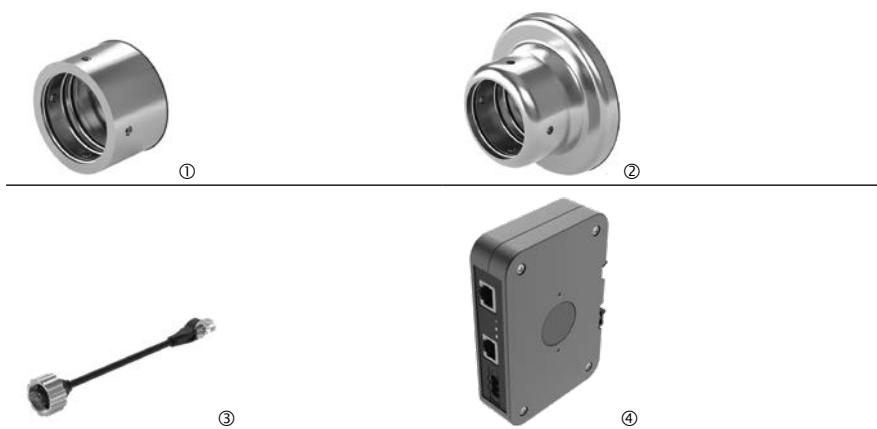
Product images are linked to further information.

TXF700 Mounting Examples

Pipe installation 1



This assembly can be used for display sizes 5" ... 10"

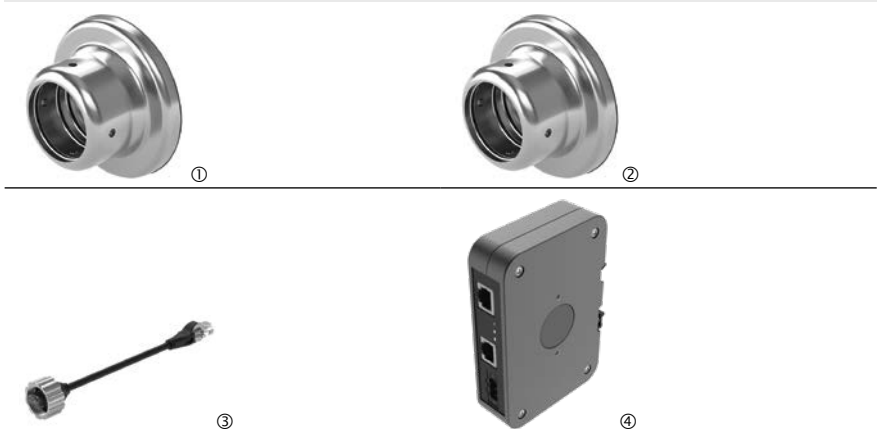


ID	Type designation	Description	Position
100020090	TXF-MT-01	Pipe support on the HMI	①
100020091	TXF-MT-02	Pipe support for wall/floor	②
100020100	TXF-M22G-RJ45-5M	M22 PoE Ethernet cable, 5 m	③
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	④

Pipe installation 2



This assembly can be used for display sizes 15" ... 21"



ID	Type designation	Description	Position
100020091	TXF-MT-02	Pipe support for wall/floor	①
100020091	TXF-MT-02	Pipe support for wall/floor	②
100020100	TXF-M22G-RJ45-5M	M22 PoE Ethernet cable, 5 m	③
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	④

Wall mounting 1



This assembly can be used for display sizes 5" ... 10"

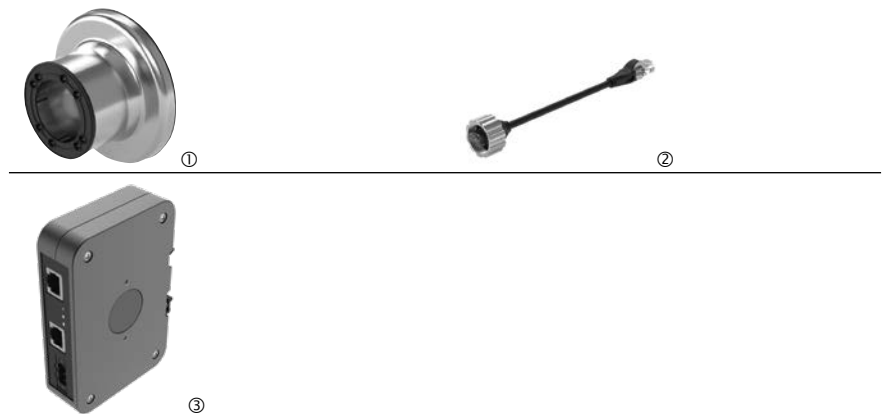


ID	Type designation	Description	Position
100020092	TXF-MT-03	Wall bracket for TXF705, 707 and 710	①
100020100	TXF-M22G-RJ45-5M	M22 PoE Ethernet cable, 5 m	②
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	③

Wall mounting 2



This assembly can be used for display sizes 15" ... 21"



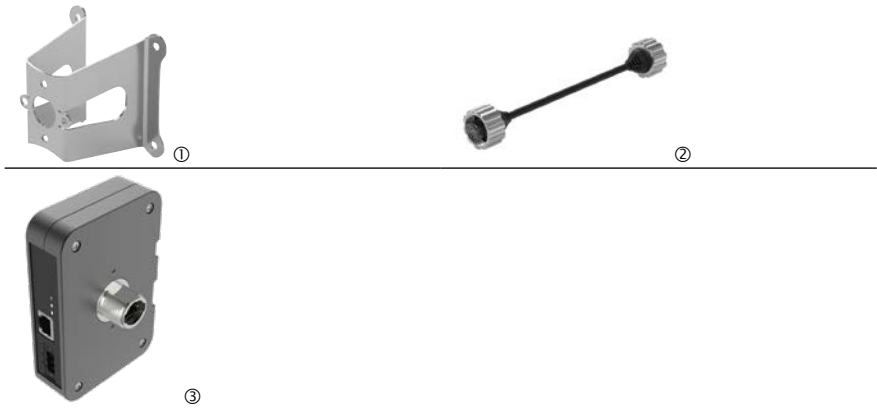
ID	Type designation	Description	Position
100020093	TXF-MT-04	Wall bracket for TXF715 and TXF721	①
100020100	TXF-M22G-RJ45-5M	M22 PoE Ethernet cable, 5 m	②
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	③

TXF700 Mounting Examples

VEESA mounting 1



This assembly can be used for display sizes 5"…21"

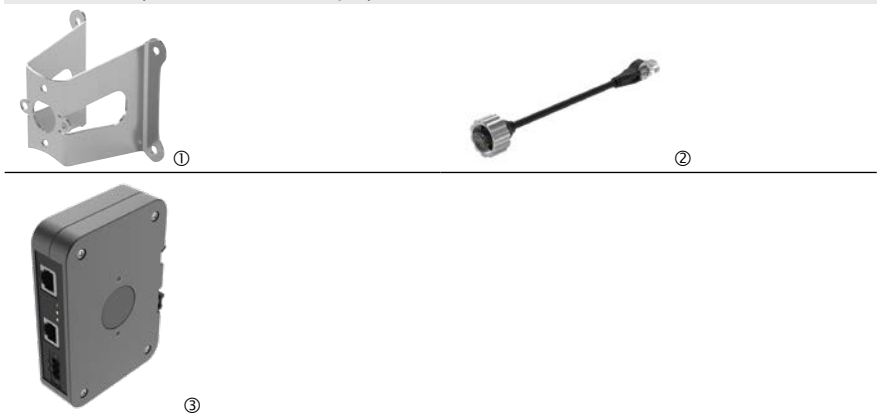


ID	Type designation	Description	Position
100020096	TXF-MV-01	VESA mounting for all TXF700	①
100020102	TXF-M22G-M22G-5M	M22 PoE Ethernet cable, 5 m	②
100017852	PSU20-PoE-36W02	PoE injector, RJ45 input, RJ45 M22 PoE output	③

VEESA mounting 2



This assembly can be used for display sizes 5"…21"

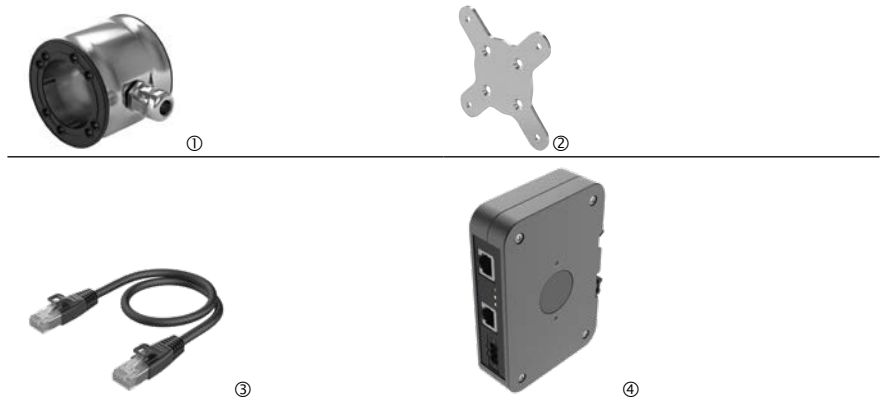


ID	Type designation	Description	Position
100020096	TXF-MV-01	VESA mounting for all TXF700	①
100020100	TXF-M22G-M22G-5M	M22 PoE Ethernet cable, 5 m	②
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	③

Versatile accessories 1



This assembly can be used for display sizes 5" ... 10"

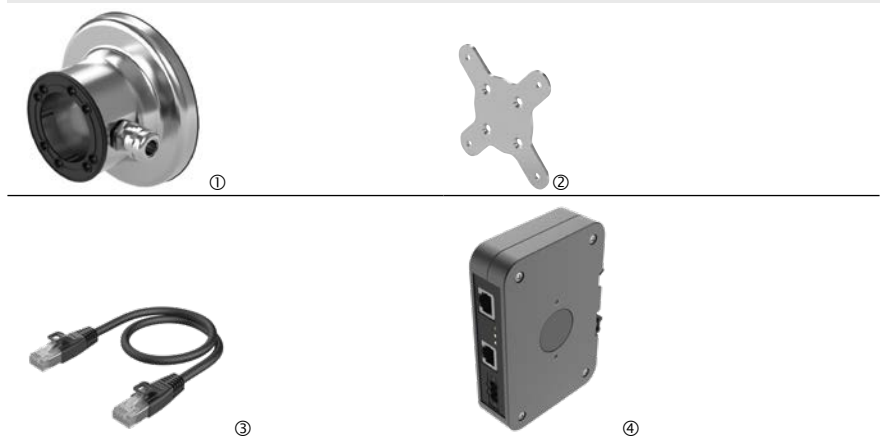


ID	Type designation	Description	Position
100022475	TXF-MT-05	Multi-purpose bracket with PG9 cable gland for TXF705, 707 and 710	①
100020097	TXF-MV-02	VESA mounting for all TXF700	②
	RJ45 Ethernet cable	Cable with a field-compatible RJ45 connector	③
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	④

Versatile accessories 2



This assembly can be used for display sizes 15" ... 21"



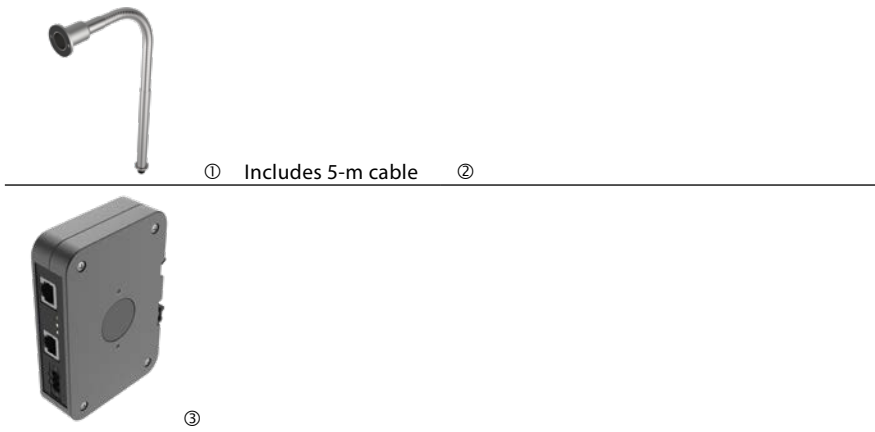
ID	Type designation	Description	Position
100022477	TXF-MT-06	Multi-purpose bracket with PG9 cable gland for TXF715 and TXF721	①
100020097	TXF-MV-02	VESA mounting for all TXF700	②
	RJ45 Ethernet cable	Cable with a field-compatible RJ45 connector	③
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	④

TXF700 Mounting Examples

Gooseneck mounting



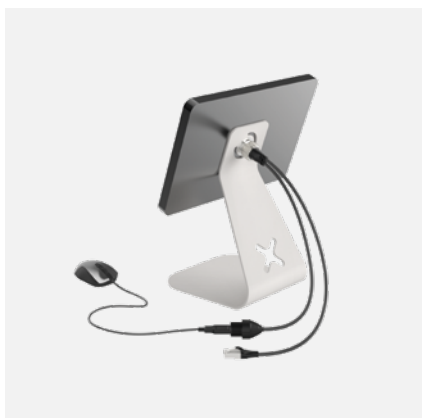
This assembly can be used for display sizes 5" ... 10"



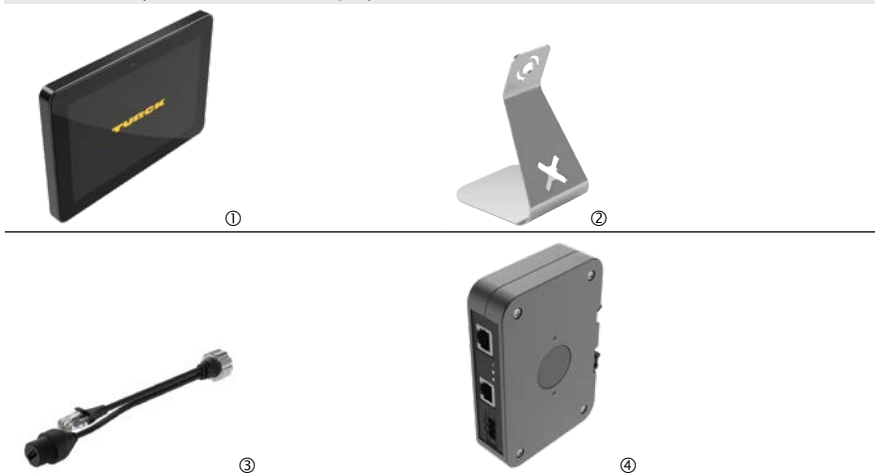
ID	Type designation	Description	Position
100020094	TXF-MG-01	Gooseneck mounting for TXF705, 707 and 710	①
	RJ45 Ethernet cable	Cable is included	②
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	④

The gooseneck attachment allows the TXF700 to be used in a wide range of scenarios away outside of industry (e.g. in restaurants, amusement parks, housing, etc.).

Table stand 1, with USB port connection



This assembly can be used for display sizes 5" ... 21"

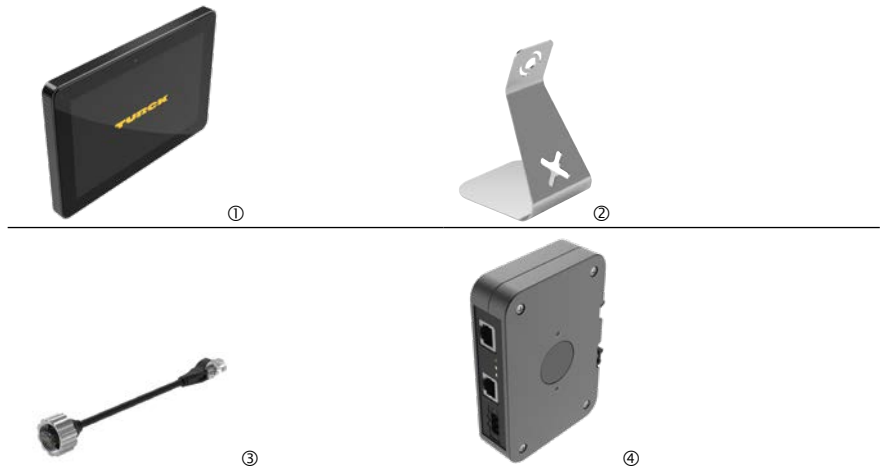


ID	Type designation	Description	Position
100017845	TXF710-00VP20	10.1" TFT screen, Wi-Fi	①
100020098	TXF-TABLE-01	Table stand for all TXF700	②
100020101	TXF-M22G-RJ45-5M-USB-1M	M22 PoE Ethernet cable, RJ45, 5 m, USB connection 1 m	③
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, RJ45 PoE output	④

Table stand 2, without USB connection



This assembly can be used for display sizes 5" ...21"

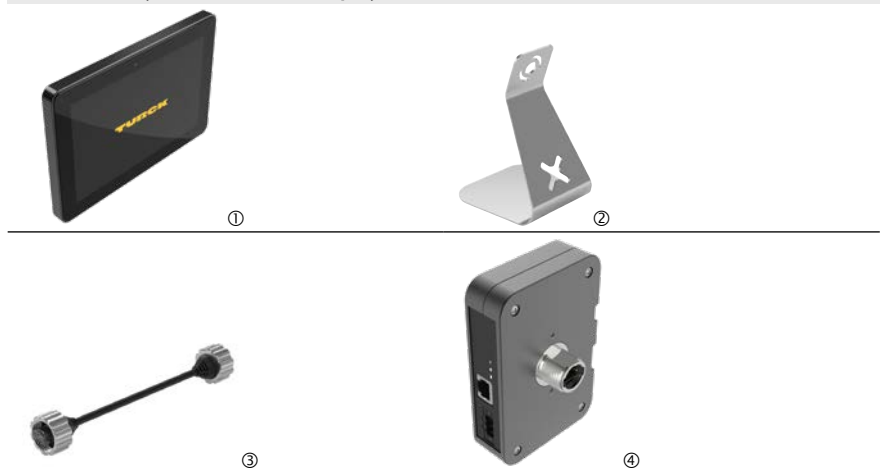


ID	Type designation	Description	Position
100017845	TXF710-00VP20	10.1" TFT screen, Wi-Fi	①
100020098	TXF-TABLE-01	Table stand for all TXF700	②
100020100	TXF-M22G-RJ45-5M	M22 PoE Ethernet cable, 5 m	③
100017850	PSU20-PoE-36W01	PoE injector, RJ45 input, M22 PoE output	④

Table stand 3, full IP67 connection, no USB connection



This assembly can be used for display sizes 5" ...21"



ID	Type designation	Description	Position
100017845	TXF710-00VP20	10.1" TFT screen, Wi-Fi	①
100020098	TXF-TABLE-01	Table stand for all TXF700	②
100020102	TXF-M22G-M22G-5M	M22 PoE Ethernet cable, 5 m	③
100017852	PSU20-PoE-36W02	PoE injector, RJ45 input, M22 PoE output	④


Accessories

Plug-in modules

Figure	ID	Type designation	Description	
	100002598	TX-RS485	RS485 interface	Galvanically isolated 9-pin SUB-D plug connection With plug-in expansion slot
	100002599	TX-RS232	RS232 interface	9-pin SUB-D plug connection With plug-in expansion slot
	6828210	TX-CAN	CANopen Manager	CANopen manager/master in CODESYS Max. 1 Mbit Galvanically isolated 9-pin SUB-D plug connection With plug-in expansion slot
	6828203	TX-IO-DX06	8 DI, 6 DO, 1 relay output	I/O module 8 digital inputs, 24 VDC, PNP 6 digital outputs, 24 VDC, 0.5A, PNP 1 relay, NO contact
	6828201	TX-IO-XX03	20 DI, 12 DO 0.5A, 8 AI, 4 AO	I/O module 20 digital inputs, 24 VDC, PNP 12 digital outputs, 24 VDC, 0.5 A, PNP 8 analog inputs, U, I, RTD, TC 4 analog outputs, U, I
	100004786	TX-EXTEND	Plug-in extension	Required to use TX-IO-XX03 I/O module with TX705 With plug-in expansion slot
	100010167	TX-DP-S	PROFIBUS-DP slave	PROFIBUS-DP slave in TX VisuPro Max. 12 Mbps transfer rate 9-pin sub-D female connector No expansion slot
	100025179	TX-LTE-WLAN	4G modem/Wi-Fi	4G mobile communications module Wi-Fi client/access point Micro-SIM slot Can be used with TX700 product series With plug-in expansion slot

The required antennas are available in various designs as accessories (see data sheet)

Protective film




















Figure	ID	Type designation	Number per unit	Use
	100003928	TX-PROTFOIL-04	10 pcs.	TX104
	100003930	TX-PROTFOIL-07	10 pcs.	TX107 or TX207




Product images are linked to further information.

The protective films can be used for HMI devices with resistive touch. More variants with added UV protection are available.

Mounting Accessories

ID	Type designation	Mounting clamp, old	Mounting clamp, new	Power supply	Serial	CAN	Use
100003186	TX100-MOUNT-07	–	4 x 	1 x 	–	–	TX104-00VPST TX107-00VPST
100003187	TX100-MOUNT-10	–	11 x 	1 x 	–	–	TX110-00VPST
100003206	TX200-MOUNT-07	–	4 x 	1 x 	–	1 x 	TX207-P3CV01
100003188	TX700-MOUNT-07	–	4 x 	1 x 	1 x 	–	TX705-P3CV01 TX707-P3CV01
100003189	TX700-MOUNT-10	–	9 x 	1 x 	1 x 	–	TX710-P3CV01
100003190	TX700-MOUNT-15	–	12 x 	1 x 	1 x 	–	TX715-P3CV01
100003191	TX700-MOUNT-21	–	14 x 	1 x 	1 x 	–	TX721-P3CV01

The sets with mounting brackets and connectors are always included in the delivery. However, they can also be ordered separately as spare parts.

ID	Type code	Power supply	Description
100002938	TX-PSC		Power supply connector, all TX HMI and PLC variants



Product images are linked to further information.

Overview of Approvals

ID	Type designation	UL approval	Class I Div. 2
100002311	TX104-00VPST	Yes (E484727)	Yes (E484803)
100002312	TX107-00VPST	Yes (E484727)	Yes (E484803)
100002313	TX110-00VPST	Yes (E484727)	Yes (E484803)
100002080	TX207-P3CV01	Yes (E484727)	-
100002029	TX705-P3CV01	Yes (E484727)	Yes (E484803)
100002030	TX707-P3CV01	Yes (E484727)	Yes (E484803)
100002031	TX710-P3CV01	Yes (E484727)	Yes (E484803)
100002032	TX715-P3CV01	Yes (E484727)	Yes (E484803)
100002033	TX721-P3CV01	Yes (E484727)	Yes (E484803)
100007471	TX707FB-P3CV01	Yes (E484727)	-
100007472	TX715FB-P3CV01	Yes (E484727)	-
100007473	TX707HB-P3CV01	Yes (E484727)	Yes (E484803)
100007474	TX710HB-P3CV01	Yes (E484727)	Yes (E484803)
100017839	TXF705-00VPST	Yes (E484727)	Yes (E484803)
100017841	TXF707-00VP20	Yes (E484727)	Yes (E484803)
100017845	TXF710-00VP20	Yes (E484727)	Yes (E484803)
100017847	TXF715-00VP20	Yes (E484727)	Yes (E484803)
100017849	TXF721-00VP20	Yes (E484727)	Yes (E484803)
100009353	TX700S-P3WV01	Yes (E484727)	Yes (E484803)
100009354	TX700D-P3WV01	Yes (E484727)	Yes (E484803)
100009355	TX700Q-P3WV01	Yes (E484727)	Yes (E484803)
6828201	TX-IO-XX03	Yes (E484727)	Yes (E484803)
6828203	TX-IO-DX06	Yes (E484727)	-
6828210	TX-CAN	Yes (E484727)	Yes (E484803)
100002599	TX-RS232	Yes (E484727)	-
100004786	TX-EXTEND	Yes (E484727)	Yes (E484803)
100002598	TX-RS485	-	-
100010167	TX-DP-S	-	-
100009535	TX-UMTS	Yes (E484727)	Yes (E484803)
100025179	TX-LTE-WLAN	Yes (E484727)	-

ATEX	IEC Ex	DNV GL	Mobile radio
-	-	-	
-	-	-	
-	-	-	
-	-	-	
Yes	Yes	Yes (TAA000027Z)	
Yes	Yes	Yes (TAA000027Z)	
Yes	Yes	Yes (TAA000027Z)	
Yes	Yes	Yes (TAA000027Z)	
Yes	Yes	Yes (TAA000027Z)	
-	-	-	
-	-	-	
Yes	Yes	-	
Yes	Yes	-	
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Yes	Yes	-	
Yes	Yes	-	
Yes	Yes	-	
-	-	Yes (TAA000027Z)	
-	-	Yes (TAA000027Z)	
-	-	Yes (TAA000027Z)	
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-	-	-	FCC, IC

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