

TX700 Series



The HMI/PLC panels of the TX700 series impress with innovative design. 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. 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 recognized

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.

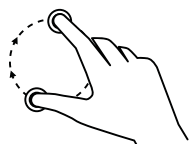
Plug-in modules

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.

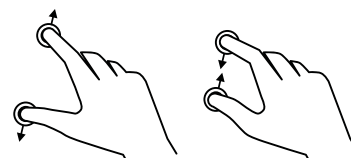
Swipe



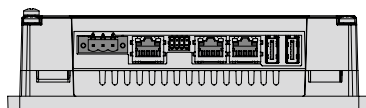
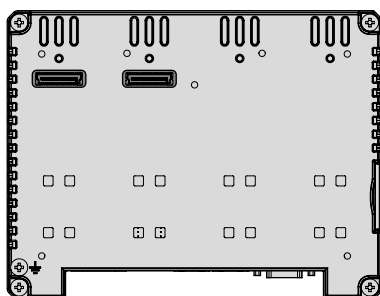
Rotate



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
Ident.-No.	100002029	100002030
Display/touch		
Display	TFT color	TFT color
Touch	Capacitive	Capacitive
Active screen area	5"	7"
Resolution (pixels)	800 x 480	800 x 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 x 10/100 Mbit	1 x 10/100/1000 Mbit 2 x 10/100 Mbit
Serial ports	1 x (RS232/RS485/RS422, configurable)	1 x (RS232/RS485/RS422, configurable)
USB ports	1 x host v.2.0, max. 500 mA	2 x host v.2.0, max. 500 mA
SD card	Yes	Yes
Expansion slot	1 x plug-in slot	2 x 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 x 107 mm	187 x 147 mm
Installation cutout (W x H)	136 x 96 mm	176 x 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 x 800	1366 x 768	1920 x 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
1 x 10/100/1000 Mbit	1 x 10/100/1000 Mbit	1 x 10/100/1000 Mbit
2 x 10/100 Mbit	2 x 10/100 Mbit	2 x 10/100 Mbit
1 x (RS232/RS485/RS422, configurable)	1 x (RS232/RS485/RS422, configurable)	1 x (RS232/RS485/RS422, configurable)
2 x host v.2.0, max. 500 mA	2 x host v.2.0, max. 500 mA	2 x host v.2.0, max. 500 mA
Yes	Yes	Yes
2 x plug-in slots	2 x plug-in slots	2 x 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 x 197 mm	422 x 267 mm	552 x 347 mm
271 x 186 mm	411 x 256 mm	541 x 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
Ident.-No.	100007471	100007472
Display/touch		
Display	TFT color	TFT color
Touch	Capacitive	Capacitive
Active screen area	7"	15.6"
Resolution (pixels)	800 x 480	1366 x 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	1 x 10/100/1000 Mbit 2 x 10/100 Mbit	1 x 10/100/1000 Mbit 2 x 10/100 Mbit
Serial ports	1 x (RS232/RS485/RS422, configurable)	1 x (RS232/RS485/RS422, configurable)
USB ports	2 x Host v2.0, max. 500 mA	2 x Host v2.0, max. 500 mA
SD card	Yes	Yes
Expansion slot	2 x plug-in slots	2 x 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 x 177 mm	450 x 295 mm
Installation cutout (W x H in mm)	176 x 136 mm	411 x 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 x 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

1 x 10/100/1000 Mbit

2 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, 0.7 A maximum

10...32 VDC

-20...+60 °C

CE, cULus

UL Class I Div. 2

IP66 (front), IP20 (rear)

187 x 147 mm

176 x 136 mm

47 + 8 mm

1.5 kg


TX710HB-P3CV01

100007474

TFT color

Capacitive

10.1"

1280 x 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

1 x 10/100/1000 Mbit

2 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, 1.0 A maximum

10...32 VDC

-20...+60 °C

CE, cULus

UL Class I Div. 2

IP66 (front), IP20 (rear)

282 x 197 mm

271 x 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.

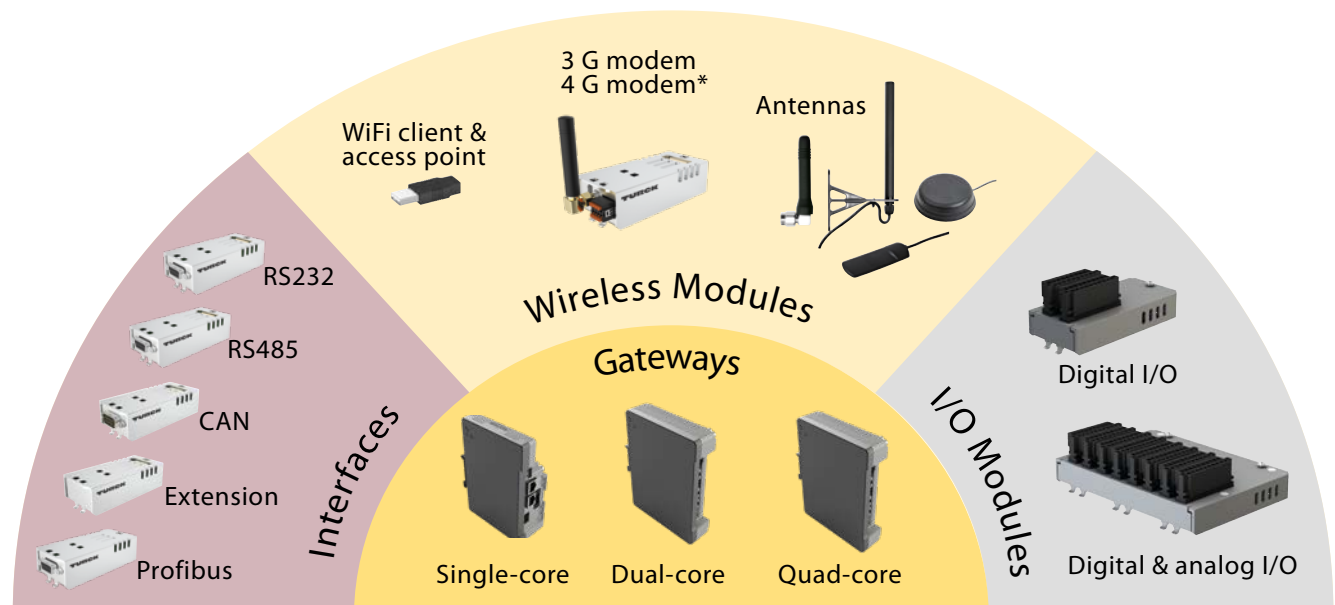
TX VisuPro

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

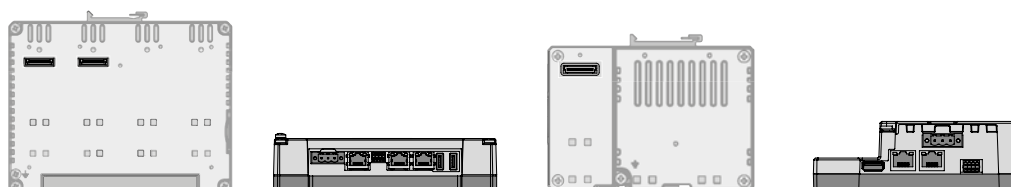
Plug-in modules also make it possible to provide TX700 devices with additional functions, interfaces and local I/O signals. The same concept is available with the TX500 device series. The same plug-in modules can therefore also be used here.

Modular and future-proof IIoT concept



*in preparation

Interfaces



3 RJ45 Ethernet ports

- ETH0: 10/100/1000 Mbit
- ETH1/ETH2: 10/100 Mbit

1 serial interface

- RS232, RS422 or RS485

1 slot for an SD card

Expansion slot

- One slot (TX700S) and two slots (TX700D & Q) for up to four plug-in modules

TX700D and TX700Q



TX700S



Type code

TX 7 05 FB - P3 CV 01

TX	7	05	FB	-	P3	CV	01
Product series	Series	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	PLC	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 IIoT Gateways



Type code	TX700S-P3WV01	TX700D-P3WV01
Ident-No.	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 x 10/100 Mbit	1 x 10/100/1000 Mbit 2 x 10/100 Mbit
Serial ports	1 x (RS232/RS485/RS422, configurable)	1 x (RS232/RS485/RS422, configurable)
USB ports	1 x Host v2.0, max. 500 mA	2 x Host v2.0, max. 500 mA
SD card	Yes	Yes
Expansion slot	1 x plug-in slot	2 x 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 x 102 mm	174 x 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

1x 10/100/1000 Mbit

2x 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.

Accessories

Plug-in modules

Figure	Ident-No.	Type code	Description	
	100002598	TX-RS485	RS485 interface	Galvanically isolated 9-pin SUB-D male connector terminal With plug-in expansion slot
	100002599	TX-RS232	RS232 interface	9-pin SUB-D male connector terminal With plug-in expansion slot
	6828210	TX-CAN	CANopen Manager	CANopen Manager/Master in CODESYS Max. 1 Mbit Galvanically isolated 9-pin SUB-D male connector terminal 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 (NO)
	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, 0.5A, pnp 8 analog inputs, U, I, RTD, TC 4 analog outputs, U, I
	100004786	TX-EXTEND	Plug-in extension	Can be used with TX504 und TX705 Required for use of the TX-IO-XX03 I/O module With plug-in expansion slot
	100010167	TX-DP-S	PROFIBUS-DP slave	PROFIBUS-DP slave in TX VisuPro Max. 12 Mbit/s transmission speed 9-pin SUB-D female connector No expansion slot
	100009535	TX-UMTS	2G/3G modem	2G/3G mobile communication module Micro-SIM slot Can be used with TX700 series With plug-in expansion slot

Protective film

Figure	Ident-No.	Type designation	Number per unit	Use
	100003928	TX-PROTFOIL-04	10 pcs.	TX504 or TX104
	100003930	TX-PROTFOIL-07	10 pcs.	TX507 or TX107 or TX207
	100003931	TX-PROTFOIL-10	10 pcs.	TX510
	100003932	TX-PROTFOIL-13	10 pcs.	TX513

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



Product images are linked to further information.

Mounting Accessories

Ident-No.	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 	–	1x 	TX207-P3CV01
6828220	TX500-MOUNT-07	4 x 	–	1 x 	–	–	TX504E-P3CV01 TX507E-P3CV01 TX507-P3CV01
6828221	TX500-MOUNT-10	10 x 	–	1 x 	–	–	TX510-P3CV01
6828222	TX500-MOUNT-13	14 x 	–	1 x 	–	–	TX513-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.

Ident-No.	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

Ident-No.	Type	UL
100002311	TX104-00VPST	Yes (E484727)
100002312	TX107-00VPST	
100002313	TX110-00VPST	
100002080	TX207-P3CV01	Yes (E484727)
6828101	TX504E-P3CV01	Yes (E484727))
6828103	TX507E-P3CV01	
6828104	TX507-P3CV01	
6828105	TX510-P3CV01	
6828107	TX513-P3CV01	
100002029	TX705-P3CV01	Yes (E484727)
100002030	TX707-P3CV01	
100002031	TX710-P3CV01	
100002032	TX715-P3CV01	
100002033	TX721-P3CV01	
100007471	TX707FB-P3CV01	Yes (E484727)
100007472	TX715FB-P3CV01	
100007473	TX707HB-P3CV01	
100007474	TX710HB-P3CV01	
100009353	TX700S-P3WV01	Yes (E484727)
100009354	TX700D-P3WV01	
100009355	TX700Q-P3WV01	
6828201	TX-IO-XX03	Yes (E484727)
6828203	TX-IO-DX06	
6828210	TX-CAN	
100002599	TX-RS232	
100004786	TX-EXTEND	-
100002598	TX-RS485	
100010167	TX-DP-S	
100009535	TX-UMTS	Yes (E484727)

UL Class I Div. 2	ATEX	IEC Ex	DNV-GL
Yes (E484803)	–	–	–
Yes (E484803)	–	–	–
Yes (E484803)	–	–	–
Yes (E484803)	Yes	Yes	Yes (TAA000027Z)
–	–	–	–
Yes (E484803)	In preparation	In preparation	–
Yes (E484803)	In preparation	In preparation	–
Yes (E484803)			Yes (TAA000027Z)
Yes (E484803)	–	–	–
Yes (E484803)			

Turck Cloud Solutions

Turck Cloud Portal



Turck Cloud Solutions offers a Cloud solution that is specifically tailored to industrial requirements and can be hosted locally or externally. The bidirectional encrypted communication is designed to maximize data security. Dashboards allow a clear overview of the machine data and statuses, and convenient operation of the machines. Additional features, such as data analysis or monitoring of production processes, create immediate real added value.

Key Features

- Scalable Cloud solutions
- Hosted locally or externally
- Encrypted, bidirectional, and efficient data transmission
- Fast and easy integration
- Can be customized
- Efficient system monitoring
- Simple remote diagnostics
- Predictive maintenance
- Identification of the optimization fields
- Easy entry into Industry 4.0

Ident-No.	Type designation	Description
9940005	TCS-Portal-Project-Registration-01	Setup of a project in the Turck Cloud Portal
9940006	TCS-Portal-Device-Registration-01	Registration of a device in the Turck Cloud Portal
9940007	TCS-Portal-Device-Dataflat-Month-01	Monthly data flat rate per device in the Turck Cloud Portal
9940008	TCS-Portal-Customization-01	Customer-specific adaptation of the Turck Cloud Portal

Note: Cloud Solutions are only available in certain countries. Please contact your local sales contact.

TCG20 - Edge gateways for the control cabinet



The EDGE gateways in the TCG20 series offer several interfaces for simple integration into automation networks. As a result, both new systems and existing systems that already have their own controllers can be quickly and easily integrated into Cloud systems. Thanks to the built-in web-based EDGE PLC with its intuitive graphical editor, data can be pre-processed and prepared as required with the TCG20 series without any additional hardware or software.

Key Features

- Fully integrated into the Turck Cloud
- Web-based EDGE PLC
- End-to-end encryption
- Optional LAN, WiFi, UMTS
- OPC UA and MQTT enable flexible Cloud connections
- Integration into virtually any automation system via Ethernet, serial and CAN interfaces
- Built-in firewall
- VPN clients
- NAT router

	Ident-No.	Type designation	UMTS	WiFi	Ethernet ports
	100002555	TCG20-UMTS-1ETH-CRS-01	•	–	1
	100002556	TCG20-UMTS-5ETH-CRS-01	•	–	5
	100002557	TCG20-WLAN-1ETH-CRS-01	–	•	1
	100002558	TCG20-WLAN-5ETH-CRS-01	–	•	5
	100002559	TCG20-UMTS-WLAN-1ETH-CRS-01	•	•	1
	100002560	TCG20-UMTS-WLAN-5ETH-CRS-01	•	•	5



Product images are linked to further information.

CODESYS-V3 Controls

IP67 controllers in the robust block I/O housing



The CODESYS-V3 controller TBEN-L-PLC is a compact IP67 PLC for the control of smaller, medium, or modular machines. With its robust housing, wide temperature range, and high protection rating, the TBEN-L-PLC enables machine-oriented automation concepts directly in the field without the need for control cabinets. The use of pre-assembled cables reduces the cabling requirements and enables fast and efficient commissioning.

Key Features

- Simple programming with CODESYS V3 acc. to IEC-61131-3
- CODESYS WebVisu (optional)
- Fully integrated into the Turck Cloud
- Extremely robust
- Temperature range -40...+70 °C
- 2 Ethernet ports
- 2 serial interfaces (RS232, RS485)
- CAN interface
- 8 local DX I/O signals
- Output current up to 2 A per channel

Ident-No.	Type designation	Description
6814018	TBEN-L5-PLC-10	IP67 controller, power supply 7/8", 5-pin
100000272	TBEN-L5-PLC-11	IP67 controller, power supply 7/8", 5-pin with WebVisu license
6814019	TBEN-L4-PLC-10	IP67 controller, power supply 7/8", 4-pin
100000273	TBEN-L4-PLC-11	IP67 controller, power supply 7/8", 4-pin with WebVisu license

Programmable gateways for modular I/O systems BL20 and BL67



The generation of programmable gateways for the modular I/O systems BL20 and BL67 are programmable via CODESYS V3. Thanks to the Turck multiprotocol technology, the devices can be used in any of the three Ethernet protocols PROFINET, EtherNet/IP™, and Modbus TCP. As distributed intelligence, the programmable gateways can pre-process data on-site, control tasks autonomously, or act as a protocol converter.

Key Features

- Simple programming with CODESYS V3 acc. to IEC-61131-3
- CODESYS WebVisu (optional)
- Can be used in PROFINET, EtherNet/IP™, and Modbus TCP networks thanks to multi-protocol Ethernet technology
- Autonomous control of applications even without higher-level control
- Modbus TCP master
- OPC UA server (in preparation)

Ident-No.	Type designation	Description
6827394	BL67-PG-EN-V3	Programmable BL67 gateway, multiprotocol Ethernet
100000041	BL67-PG-EN-V3-WV	Programmable BL67 gateway, multiprotocol Ethernet, with CODESYS WebVisu
6827393	BL20-PG-EN-V3	Programmable BL20 gateway, multiprotocol Ethernet
6827398	BL20-PG-EN-V3-WV	Programmable BL20 gateway, multiprotocol Ethernet, with CODESYS WebVisu

More information is available at www.turck.de