TX700 HMI/PLC Series
5" Display - CODESYS V3 PLC with TARGET and WEB VISU
High-Quality Metal Housing and Glass Front with a Capacitive Touch
TX705-P3CV01



- **5" TFT wide screen color display**
- **LED backlight**
- **800 x 480 pixel resolution**
- **64 K colors**
- **Capacitive touchscreen with glass front**
- **2 separated RJ45 Ethernet ports with 10/100 Mbit**
- **1 serial interface (RS232, RS485, RS422)**
- **1 USB host port**
- **1 SD card slot**

Type designation	TX705-P3CV01
Ident no.	100002029
Display / Touch	
Display	TFT colour
Touchscreen	Capacitive, Glass front
Active screen area	5″
Resolution (pixels)	800 × 480 WVGA
Format	16:9
Brightness	300 Cd/m² typ.
dimmable	yes,to 0 %
Controller	
Processor	ARM Cortex A8, 1 GHz
Memory	4 GB Flash
RAM memory	512 MB
Add-on memory	1 x SD card slot, 1 x USB host port
Real time clock	Yes (battery-buffered)
PLC data	
Programming	CODESYS V3
Released for CODESYS version	V 3.5.12.10
Programming languages	IEC 61131-3 (IL, LD, FBD, SFC, ST)
Programming interface	Ethernet
Program memory	20000 kByte
Non-volatile memory	63 kByte
Interfaces	
Onboard	2 × RJ45 Ethernet, 1 × RS232/485/422, 1 × USB host, 1 × power supply, 2 × expansion slot
Onboard for selection	CANopen Master (via extension module)
Ethernet	2 x 10/100 Mbit
Protocols	PROFINET (Controller/Master) EtherNet/IP (Scanner/Master) Modbus TCP (Master/Slave)
Fieldbus	Modbus RTU (Master/Slave) CANopen (Master)
USB	1 × host port
Serial	RS232 / RS485 / RS422
Expansion slot	One slot for up to two plug-in modules
Power supply	
Rated value	24 VDC, max. 0.6 A
Admissible voltage range	10…32 VDC

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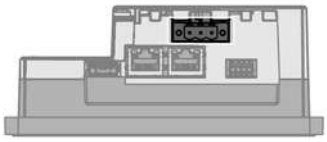
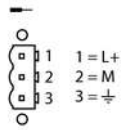
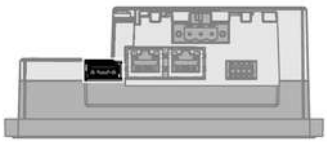
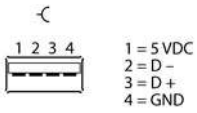
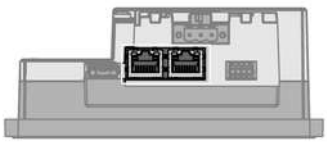
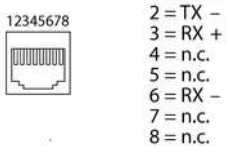
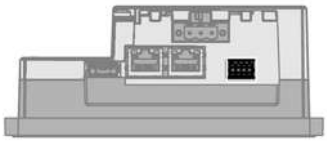
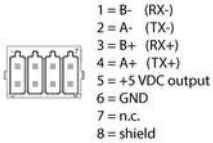
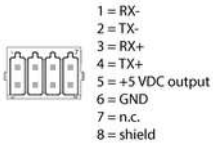
General data	
Operating ambient conditions	-20…60 °C, 5…85 % relative humidity, non-condensing
Storage ambient conditions	-20…70 °C, 5…85 % rel. humidity, non-condensing
Approvals	CE cULus LR DNV GL
Ex approval	ATEX IEC Ex Haz. Loc. Class I, Division 2, Groups A,B,C and D
Protection class	IP66 front, IP20 rear

Dimensions	
Front (W x H x D)	147 x 107 x 52 mm
Cut-out (W x H)	136 x 96 mm
Mounting depth	52+8 mm
Weight	approx. 1.2 kg

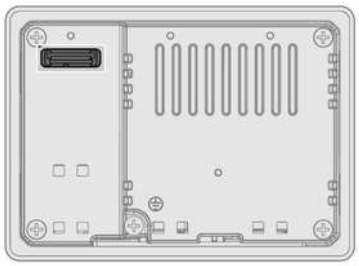
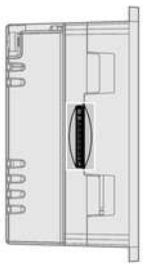
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Connection and pin assignment

	**Power Supply** The power supply connector is delivered with each device. It can be reordered at Turck as accessories. Type designation: TX-Mount-xx	Pin Assignment 
	**USB Interface**	Pin Assignment 
	**Ethernet Ports** The Ethernet ports are independent. Ethernet cables (examples): **RJ45 male connector – RJ45 male connector:** RJ45S-RJ45S-4414-2M (Order number: 6441423) **RJ45 male connector – M12 male connector, 4-pin, D-coded:** RSSD-RJ45S-4414-2M (Order number: 6441413) **RJ45 male connector – M8 male connector, 4-pin:** PSGS4M-RJ45S-4414-2M (Order number: 6933005) **RJ45 male connector — M12 female receptacle, 4-pin, D-coded: R**J45-FKSDD-4414-2M (order number: 6935282)	Pin Assignment 
	**Serial Interface** The serial interface can be operated either as RS232, RS485 or RS422. The adjacent wiring diagrams show the respective pin assignments. **PLEASE NOTE:** In RS485 mode, pins 1 and 2 as well as 3 and 4 must be externally connected!	Pin Assignment in RS232 Operating Mode  Pin Assignment in RS485 Operating Mode  Pin Assignment in RS422 Operating Mode 

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	**Port for Plug-in Module**	
	**SD Card Slot** SD card (example): SD CARD 2 GB (order number: 6828025)	

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Accessories

Type code	Ident no.	Description	Dimension drawing
TX700-MOUNT-07	100003188	TX700 mounting bracket and power connectors for 5–7" devices	

Function accessories

Type code	Ident no.	Description	Dimension drawing
TX-IO-XX03	6828201	Plug-in I/O module — 20 DI, 12 DO, 4 AI (U/I/RTD/TC), 4 AO (U/I)	
TX-IO-DX06	6828203	Plug-in I/O module — 8 DI, 6 DO, 1 relay output (NO)	
TX-EXTEND	100004786	Plug-in extension module for mechanical adjustment for using the TX-IO-XX03 module	
TX-UMTS	100009535	Plug-in radio modem with 2G/3G support	

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Function accessories

Type code	Ident no.	Description	Dimension drawing
TX-DP-S	100010167	Plug-in PROFIBUS DP slave interface, 9-pin SUB-D female connector	
TX-CAN	6828210	Plug-in CANopen interface, 9-pin SUB-D male connector	
TX-RS485	100002598	Plug-in interface for RS485/RS422, 9-pin SUB-D female connector	
TX-RS232	100002599	Plug-in interface for RS232, 9-pin SUB-D female connector	
TX-PSC	100002938	Power Supply Male Connector for TX HMI Devices	

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