

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.
dimmmable		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) Modbus RTU (Master/Slave) CANopen (Master)
Fieldbus		1 × host port
USB		RS232 / RS485 / RS422
Serial		One slot for up to two plug-in modules
Expansion slot		
Power supply		
Rated value		24 VDC, max. 0.6 A
Admissible voltage range		10...32 VDC

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General data

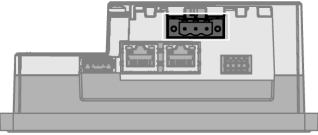
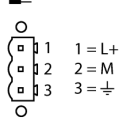
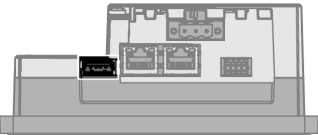
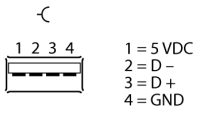
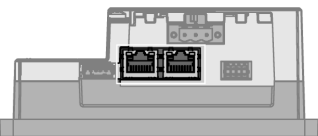
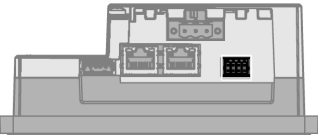
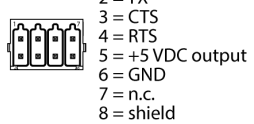
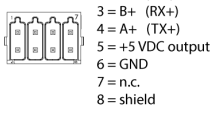
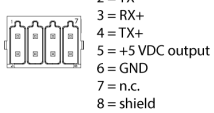
Operating ambient conditions	-20...60 °C, 5...85 % relative humidity, non-condensing
Storage ambient conditions	-20...70 °C, 5...85 % rel. humidity, non-condensing
Approvals	CE cULus LR DNV GL
Ex approval	ATEX IEC Ex Haz. Loc. Class I, Division 2, Groups A,B,C and D
Protection class	IP66 front, IP20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

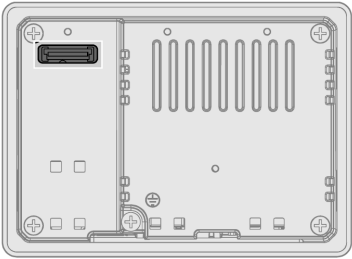
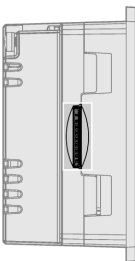
	Power Supply The power supply connector is delivered with each device. It can be reordered at Turck as accessories. Type designation: TX-Mount-xx	Pin Assignment 
	USB Interface	Pin Assignment 
	Ethernet Ports The Ethernet ports are independent. Ethernet cables (examples): RJ45 male connector – RJ45 male 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: RJ45-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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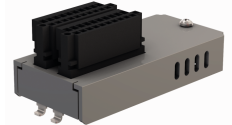
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Accessories

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	