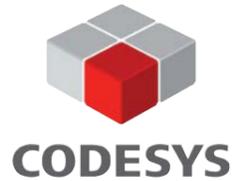


# TX500 – Types and Features

- Display sizes 7, 10 and 13 inches
- CODESYS V3 PLC
- CODESYS V3 TargetVisu
- PROFINET Master
- EtherNet/IP™ Scanner
- Modbus TCP Master/Slave
- Modbus RTU Master/Slave
- Two Ethernet Ports
- Serial Interface
- USB Host Interfaces
- SD Card Slot



## Equipment overview

ID number	Type	Display	Resolution	CODESYS PLC	CODESYS TargetVisu
6828104	TX507-P3CV01	7" TFT	800 x 480 px	integrated	integrated
6828105	TX510-P3CV01	10" TFT	800 x 600 px	integrated	integrated
6828107	TX513-P3CV01	13" TFT	1280 x 800 px	integrated	integrated

## Accessories plug-in modules

ID number	Type	Description
6828201	TX-IO-XX03	Plug-in 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)
6828203	TX-IO-DX06	Plug-in I/O module 8 digital inputs 24 VDC, PNP; 6 digital outputs 24 VDC, 0.5 A, PNP, 1 relay output
6828210	TX-CAN	Plug-in communications module CANopen Master

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# TX500 HMI with CODESYS 3 PLC



# TX500

The HMIs (human machine interfaces) of the TX500 series combine control, operation and monitoring in a full-fledged control thanks to the full-scope CODESYS V3 PLC with integrated visualization. Display sizes of 7", 10" and 13" inches offer you the flexibility to choose a screen size appropriate for your application.

The TX500 devices rely on CODESYS V3 in terms of programming acc. to IEC 61131-3 and visualization. Thus, programming and visualization can be managed comfortably in one software.

Turck provides free CODESYS packages for the users to integrate the TX500 devices simply and conveniently. CODESYS WebVisu enables remote access to the visualization and completes the feature set.

Thanks to the variety and flexibility of the integrated interfaces as well as the available master and slave functionality, the TX500 HMIs are able to communicate with any field devices or parent controls.



## HMI and PLC in one Device

### 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 LD, CFC, IL, ST and SFC available. All supported Ethernet and fieldbus protocols can be configured via the software that allows real object-oriented PLC programming.



### CODESYS TargetVisu

The visualization of the HMI content can be created directly in the CODESYS V3 development environment, thanks to CODESYS TargetVisu. Programming and visualization are implemented in one software tool with direct access to the variables. Functions such as recipe management, trend recording and user management are available to the user.



### Master/Slave Functionality

Through the integrated functionalities PROFINET master, EtherNet/IP™ scanner, Modbus TCP master and slave, as well as Modbus RTU master and slave, the TX500 devices open up many flexible connectivity options for field devices and parent controls. A serial RS232/RS485/RS422 interface completes the range of communication interfaces.



#### Ethernet interfaces

The TX500 displays are equipped with two RJ45-Ethernet interfaces. Both ports are interconnected via an internal switch and are addressed using the same IP address.



#### Serial interfaces

Through a serial interface, which can be used flexibly as RS232, RS485 or RS422 interface, also serial devices can be connected directly.



#### Memory upgrade

The internal memory can be flexibly expanded via two USB host ports and an SD card slot. In this way, an easy exchange of files and log files is also possible.



#### Plug-in modules

Through simple plugging of extension modules, HMIs can be extended, for example, with a CANopen master interface or multifunction I/O modules.