

# TURCK

## Industrial Automation

### OPERATOR INTERFACES AND PLC VT250

CANopen DeviceNet



EtherNet/IP



***Sense it! Connect it! Bus it! Solve it!***

# VT250 – Operating and control system

VT250 HMIs (Human Machine Interfaces) combine operating and monitoring functions with integrated controlling. This allows them to be operated either as HMI-PLCs or as pure HMIs.

The devices are equipped with a 5.7" QVGA-TFT color touch screen at the front and are IP65 protected. The compact plastic housing measures 212 x 156 x 50 mm and fits even in confined spaces.

## Master or Slave

The VT250 hardware supports all standard fieldbus and Ethernet protocols, such as PROFIBUS-DP, CANopen, DeviceNet™ and Modbus RTU, also the Ethernet protocols Modbus TCP, PROFINET, EtherNet/IP™, EtherCAT, Sercos III and POWERLINK.

What makes it special? The device is configurable in any direction, both as master and as slave.

The VT250 is thus able to perform as a gateway between fieldbus and Ethernet protocols. Configured as a PROFIBUS-DP master, it controls I/O and fieldbus signals

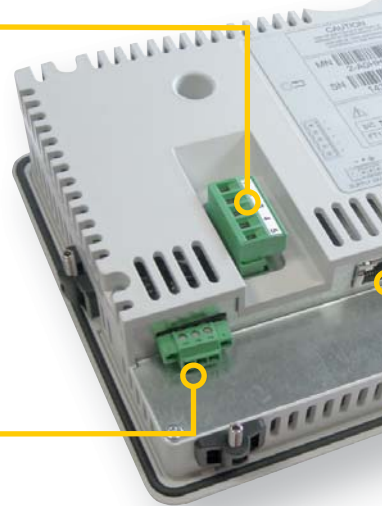


■ Fieldbus port master or slave



CAN port or PROFIBUS port

■ 24 VDC power supply



EtherCAT®

PROFINET  
INDUSTRIAL ETHERNET

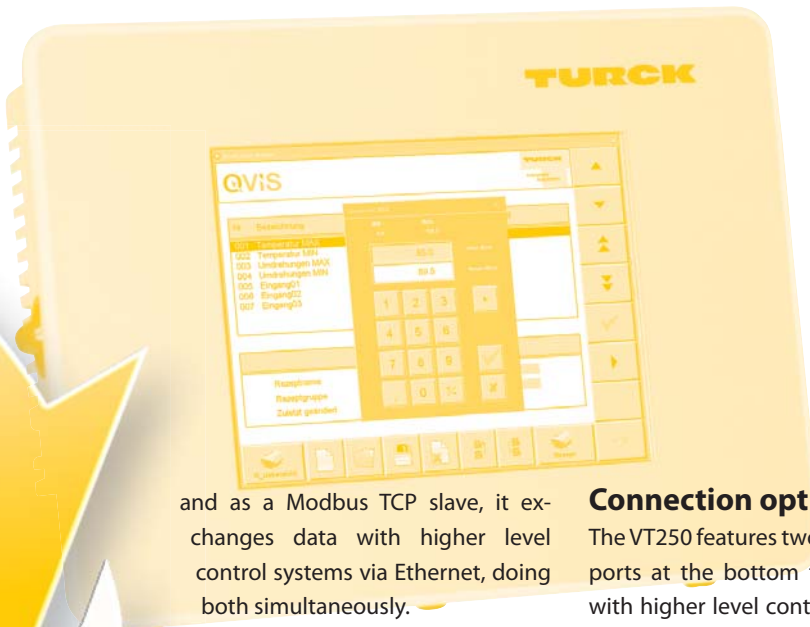
EtherNet/IP™

ETHERNET POWERLINK

Modbus

**COMMUNICATION**

**VISUALIZATION**



and as a Modbus TCP slave, it exchanges data with higher level control systems via Ethernet, doing both simultaneously.

### Connection options

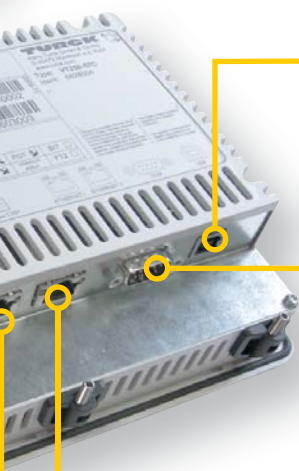
The VT250 features two real-time Ethernet ports at the bottom for communication with higher level control systems. Thanks to the double port solution the device can also be applied in an Ethernet installation arranged in line topology.

A serial COM port for RS232 and RS485 round off the spectrum of connection possibilities, allowing peripheral devices such as a barcode reader or a light grid to be connected to the local control process for example.

### Smart details

The slot for the SD memory card as well as the buffer battery are located at the backside of the device. Both are accessible from the top, allowing the battery to be exchanged without tools.

An open style CAN port for DeviceNet™ respectively CANopen is available or a 9-pole SUB-D connector for PROFIBUS-DP or MPI. The plugs on the backside are recessed which protects them against mechanical impacts and ensures that the connection cable is routed in the same direction as all other cables.



■ USB port



■ COM port RS232/RS485



■ Dual Ethernet port master or slave

bus TCP

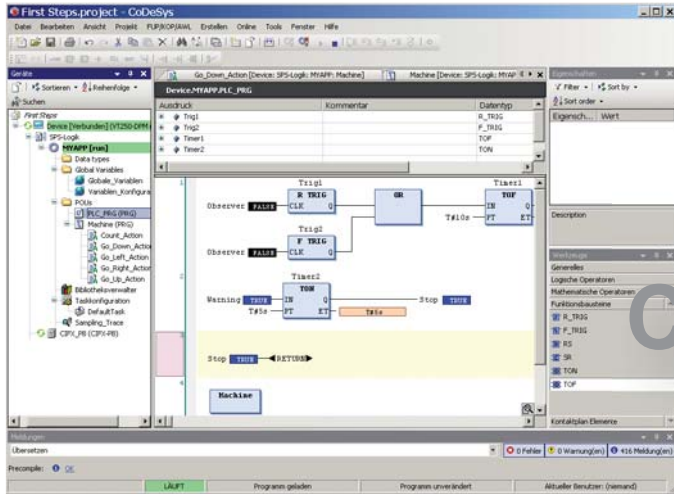
**SERCOS**  
interface

**CANopen**

**PROFI**  
PROCESS FIELD BUS  
**BUS**

**DeviceNet**

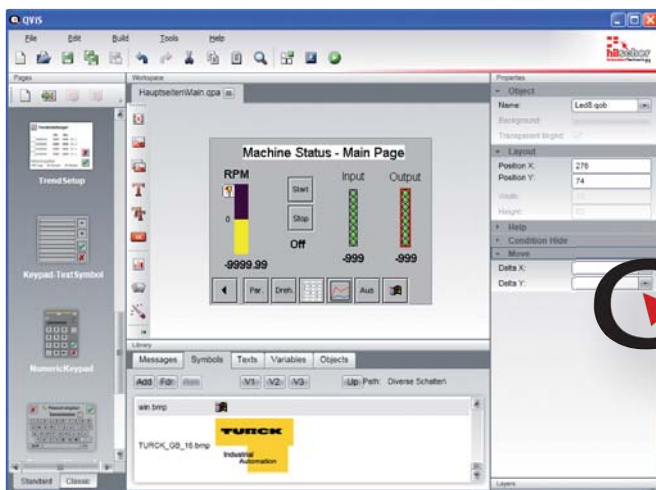
### Programming with CoDeSys



The controller integrated in the VT250 operates on the basis of the IEC 61131 approved CoDeSys programming software, version 3. All standard programming lan-

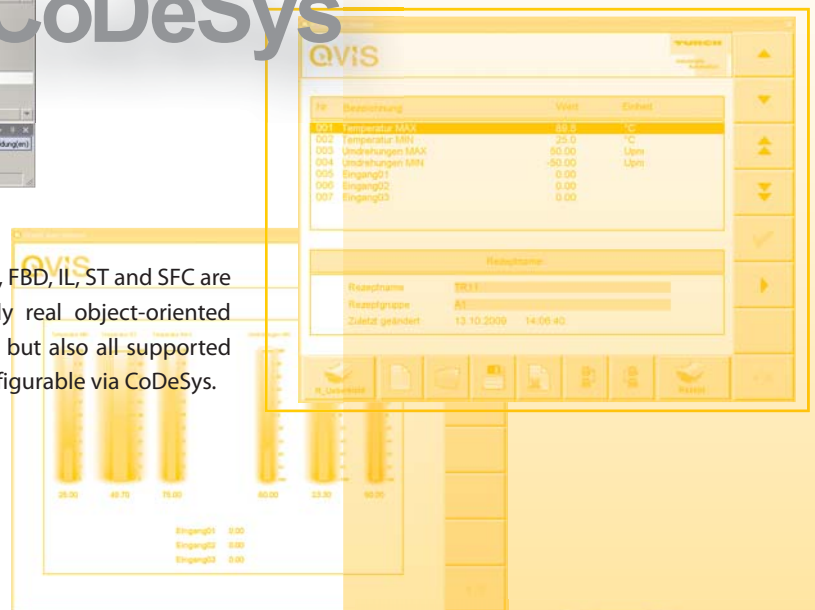
guages such as LD, FBD, IL, ST and SFC are available. Not only real object-oriented PLC programming but also all supported fieldbuses are configurable via CoDeSys.

### Visualizing with QVIS



QVIS is the software environment used for visualization in the VT250 series. QVIS and CoDeSys are closely linked to ensure an easy import of symbols for data exchange.

Pure visualization solutions are implementable with further drivers provided by QVIS for the most common control systems (MPI, RFC1006, DF1, ...).



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