# HMI 12.1" 1280x800
# TD820

## HMI with integrated soft-PLC, 12.1" display, resistive touchscreen

**Operator panel** TD820 is a **touchscreen HMI** running Windows CE. The ARM CORTEX A8 processor and an integrated solid state memory make it suitable for **industrial use**, even in environments in which it may be subject to mechanical disturbances, such as vibrations.

Two serial Buses (RS232 and RS485), an ethernet port 10/100/1000 and a CanOpen bus ensure connectivity to the main field buses.  It is possible to directly connect digital I/Os (up to two **ETD1644** expansion boards), creating a complete and compact control system. The USB port, available also on front panel, provides functions such as data exporting, program updates, and peripherals connection.
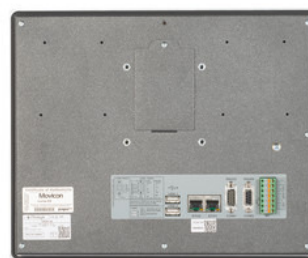
The entire range of HMI panels with Windows CE features a **programmable soft-PLC** relying on LogicLab development environment (compliant with programming standard IEC-61131), which allows development of control logics in a stand-alone panel, without the support of external PLC modules. The SCADA Movicon 11 CE by Progea softwarehouse is integrated as runtime into Pixsys panels and enables powerful graphics and synoptics, as well as direct interface with the integrated soft-PLC or with third-party PLCs.

# User friendly, multimedia su

For the entire range of Pixsys products we provide tec programming and operation via our online forum and

Programming tutorial videos are available on our yout

As for all PIXSYS products, the **QR code** enables tracea cycle; the information and documentation online can I CODE with your mobile device to  check product's tech conditions.

# Ordering codes

| | |
|---|---|
| TD820-AD | HMI 12.1" integrating soft-p Movicon CE Lite |
| 2400.35.003 | Upgrade to Movicon CE Ful |
| ETD1644-AD | Plug-in module 16 DI/DO - 4 AI - 4 AO / Alim. 12..24VDC |
| MCM260-1AD | 16 DO Modbus RTU/CanOpen |
| MCM260-2AD | 16 DI Modbus RTU/CanOpen |
| MCM260-3AD | 8 DI + 8 DO Modbus RTU/CanOpen |
| MCM260-4AD | 8 DI + 8 DO Relays Modbus RTU/CanOpen |
| MCM260-5AD | 4 AI + 2 AO Modbus RTU/CanOpen |

# Main features

| | |
|---|---|
| Box | 317 x 256 x 35 mm |
| Power supply | 12...24 V AC / V DC ±15% 50/60 Hz (galvanic isolation 2500V) |
| Power Consumption | 8,5 W |
| Display | LCD TFT touch screen 12.1", 1280x800 pixel, 65k colors with 4 wires resistive touch integrated, (lifetime typ. 12000h @ 25°C) |
| Operating conditions | Temperature 0-45 °C, humidity 35..95 uR% (non condensing) |
| Material | Front panel: aluminium; Box: steel 10/10, Ral 7016 |
| Weight | Approx. 937 gr |

| Explansion module on board | Analogue inP6ts, Rox 46U Tpselectable.TC1B20, K, J, S, R (automatic |
| Serial expansions | Pixsys modules MCM260-1/2/3/4/5; Modbus RTU/TCP or CanOpen devices |
| (opt. max 3) | compensation of the cold junction 0..50°C, accuracy @25°C ±0.2% F.S. or |

# Hardware features and communication ports

| Processor | ARM Cortex A8 @ 1 GHz |
|---|---|
| Memory | eMMC 4 GB/ RAM 512 MB DDR3 |
| Serial communication | RS232-RS485 (1200..115200 Baud) galvanically isolated |
| Field bus | CAN (70K..1Mbit) galvanically isolated |
| USB | 1 USB 2.0 on frontal + 1 USB 2.0 on back side |
| Ethernet | 1 Ethernet 10/100 Base-T on RJ45 connector |
| Memory card | SD/MMC Reader |

# Software features

| Operating system | Windows 7 Embedded Compact |
|---|---|
| Programming of operating logics | Logiclab, optional choice of languages according to IEC 61131-3 |
| Programming of graphic interface | Movicon 11 |
| Communication protocols | Third parts I/O Driver supported by Movicon, Modbus RTU Master/Slave; Modbus TCT/IP Master/Slave; CAN Open Master; Free-port mode for modems or proprietary devices |
| Clock | Real-Time clock, Back-up battery |

# Installation