Sontheim

eControl mIO xt

Touch-based control with motion sensor and OPC UA

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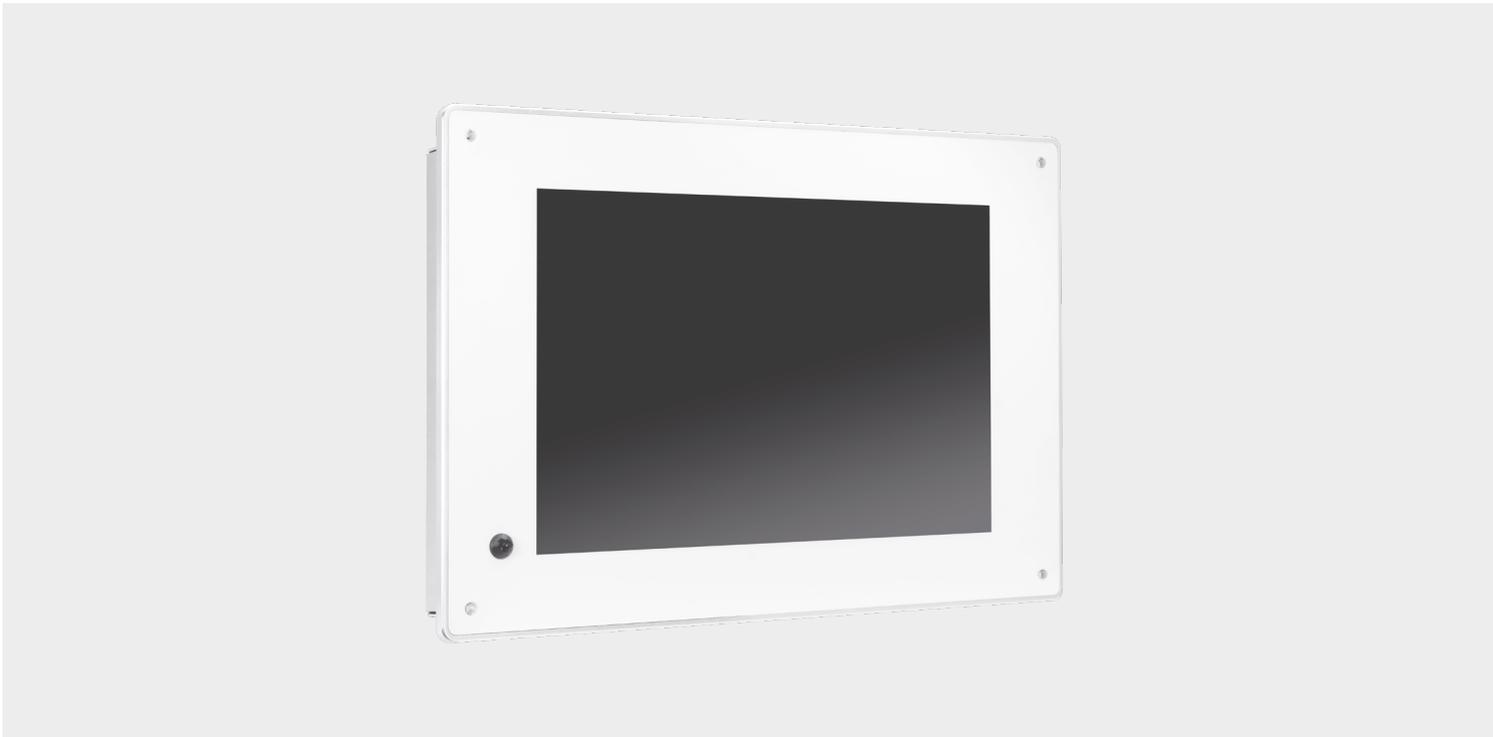
eControl mIO xt

Equipped with a variety of interfaces, the control with 10.1" touch display can be used for a wide range of automation applications. An integrated motion sensor makes it an energy miracle.

Key Features

- Motion sensor
- Up to 66 IOs
- MDT 2.0 integrated
- OPC UA Server & Client
- 2× CAN acc. to ISO 11898, galv. isolated
- EtherCAT acc. to IEC 61158
- 2× Ethernet (100 Mbit/s, 1000 Mbit/s)
- Linux operating system

Unbeatable Team with MDT 2.0

The Modular Diagnostic Toolchain with OPC UA can be integrated on the PLC, creating the perfect state-of-the-art solution for your Industrie 4.0 applications. The new MDT® 2.0 provides a standardized tool to access data of the machine. It enables the standardization of data description (ODX), programming (OTX) and data sharing and provision (OPC UA). It is the perfect basis for innovative machine park monitoring. Combined with the eControl mIO xt, Sontheim creates the all-round package: smooth machine control, standardized diagnostics and simple cloud connection.

Variety of Interfaces

The eControl mIO xt is equipped with a number of interfaces. In addition to a motion sensor, the controller also has each two CAN, Ethernet, and USB connections as well as up to six temperature sensor inputs. One of the two Ethernet interfaces is EtherCAT and OPC UA capable. An interface board carries the digital inputs and outputs, as well as the majority of analog interfaces. All connectors are accessible from the rear side of the device.

Technical Data

Hardware

Hardware	
CPU	IMX6 Quad Core
Co-Processors	2× ATXMEGA, 1× LPC433x
RAM	1 GB LPDDR2
Speicher	4 GB
Display	10.1" RGB 1280 (W) ×3(RGB) ×800(H) / 500 cd / IPS / anti-glare
Touch	resistive
LEDs	2 LEDs for display of power supply and CAN communication
Dimensions (l×w×h)	300 mm × 200 mm × 55 mm
Operating temperature	−20 °C up to +60 °C
Lagertemperatur	−30 °C up to +85 °C
Real-Time-Clock	2 weeks buffered via supercaps
Weight	approx. 2,1 kg
Protection class (front)	IP65
Protection class (back)	IP20
Power supply	24 V DC ±15 %

Interfaces

Interfaces	
Motion sensor	1× PIR Sensor
CAN	2× CAN acc. to ISO 11898, galv. isolated
USB	2× USB 2.0
Ethernet	2× (1× 100 Mbit/s: EtherCAT, OPC UA; 1× 1000 Mbit/s)
Digital inputs	24× DI (3×8), 24 V DC
Digital outputs	24× DO (3×8), 24 V DC
Analog inputs (optional)	10× AI, 16-bit, Output voltage range: 0 up to 10 V Output current range: 0 up to 20 mA
Analog outputs (optional)	4× AO, 16-bit Output voltage range: 0 up to 10 V
Temperature sensor inputs	4× 24-bit, optional up to 6×
SD card slot	1×

Operating system

Operating system	
Operating system	Linux
Runtime	opt.: MDT 2.0 embedded

Motion sensor

The pyroelectric sensor, or PIR sensor for short (Passive Infrared Sensor), reacts to movement and switches the display and backlight on as soon as movement is registered. This function is used to turn off the display and backlight when the device is not being operated and saves energy. The sensor is seamlessly integrated into the front panel.

EtherCAT and CAN Interfaces

Via the CAN and Ethernet interfaces you can configure the module for a CAN or EtherCAT network. As interfaces for data exchange it has two RJ45 sockets and one D-Sub9 CAN interface, which allows an easy connection with other modules.

Pin assignment

RJ 45 Ethernet 100 Mbit/s

1	LAN/EtherCAT_TX+
2	LAN/EtherCAT_TX−
3	LAN/EtherCAT_RX+
4	–
5	–
6	LAN/EtherCAT_RX−
7	–
8	–

RJ 45 Ethernet 1000 Mbit/s

1	D1+
2	D1−
3	D2+
4	D3+
5	D3−
6	D2−
7	D4+
8	D4−

CAN D-Sub9

2	CAN L (low)
3	CAN GND
5	CAN GND
7	CAN H (high)

USB

1	USB 5V
2	USB D−
3	USB D+
4	USB 0V

Order information

V966373700	eControl mIO xt
V966373611	Clamp block

Mobile Automation

Industrial Automation

Diagnostics

Connectivity

We are looking forward to your enquiry!

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