



E°CONTROL XBM MODULES

The recent generation of fieldbus modules expands the E°CONTROL product lines on the basis of the following features:

- ▶ Integration in synchronous Ethernet Fieldbus networks (SERCOS III and EtherCAT®)
- ▶ Only 1 microsecond delay for each used module
- ▶ High flexibility
- ▶ Compact design
- ▶ Easy wiring without tools

XBM – Bus Coupler



- **XBM KOP EC** - EtherCAT®-Bus Coupler
- **XBM KOPCAN** – CAN-Bus Coupler
- **XBM KOP S3** – sercos III-Bus Coupler

XBM – Digitale Module



- **XBM DIO88/1:** 8 digital inputs and 8 digital outputs
 - Inputs 24 VDC / 2.4 mA
 - Outputs 500 mA output current at 24 VDC
 - Connection of sensors and actuators in 1-wire technology
- **XBM DI16/1:** 16 digital inputs 24 VDC / 2.4 mA
 - Connection of sensors in 1-wire technology
- **XBM DI16/4:** 16 digital inputs 24 VDC / 2.4 mA
 - Connection of sensors in 2-, 3- or 4-wire technology
- **XBM DI32/1:** 32 digital inputs 24 VDC / 2.4 mA
 - Connection of sensors in 1-wire technology
- **XBM DO16/1:** 16 digital outputs
 - Each 500 mA output current at 24 VDC
 - Connection of actuators in 1-wire technology
- **XBM DO16/3:** 16 digital outputs
 - Each 500 mA output current at 24 VDC
 - Connection of actuators in 3-wire technology
- **XBM DO32/1:** 16 digital outputs
 - Each 500 mA output current at 24 VDC
 - Connection of actuators in 1-wire technology

XBM – Analog Module



- **XBM AI08:** 8 analog inputs, current / voltage, 16-bit resolution
Range: 0...+5 V, -5...+5 V, 0...+10 V, -10...10 V, 0...20 mA, 4...20 mA, -20...+20 mA
- **XBM AO08:** 8 analog outputs, current / voltage, 16-bit resolution
Range: 0...+5 V, -5...+5 V, 0...+10 V, -10...10 V, 0...20 mA, 4...20 mA, -20...+20 mA
- **XBM AIO22:** each with 2 analog inputs and outputs, current / voltage, 16-bit resolution
Range: 0...+5 V, -5...+5 V, 0...+10 V, -10...10 V, 0...20 mA, 4...20 mA, -20...+20 mA
- **XBM PT08:** 8 analog inputs, measuring ranges 500 Ω and 5 kΩ, used for:
 - Platinum (Pt) and nickel sensors (Ni) according to DIN EN 60751
 - Silicium (KTY8x)
 - Copper sensors (CU10, CU50, CU53)



XBM – Function- and communication modules



- **XBM SER01** – Communication module, 1 serial port
 - RS-232-, RS-422 or RS-485 operation
 - Baud rate 300 and 115200 baud, parity: None, Even, Odd, Mark, Space
- **XBM CNTI02** - Counter and Incremental encoder interface
 - 2 Incremental encoder interfaces up to 300 kHz, 2 counter inputs up to 100 kHz
 - 8 digital inputs and 2 digital outputs for 24 VDC signals

E°EXC88 – The control for the XBM modules



- Embedded Controller for PLC / CNC / Motion
 - Seamless integration of CNC and motion functionality
 - CODESYS V3 runtime system
 - Up to 32 CNC and up to 64 motion axes (combined)
 - CNC with a variety of technology-specific functions ((from eccentricity grinding up to oxygen cutting))
 - CNC kernel with large instruction set
- Easy configuration by automatically detecting of supported drives and powerful engineering tool
- XBM-bus with direct connection for fast I / O modules
- High Speed Serial Bus (HSSB) for CPU expansion and additional fieldbus interfaces
- Customer specific versions possible



Full documentation is available on our
Engineering Documentation Platform E°EDP.
edp.eckelmann.de



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E°CONTROL XBM Overview
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