

# IndraControl XM

## Flexible control in real-time



# IndraControl XM

## Modular, robust and powerful

The family of the compact control platform IndraControl XM offers the latest hardware technology in a robust housing design. It combines the high real time capability of the Sercos automation bus and the flexibility of the I/O family IndraControl S20 to a modular and complete automation system for all applications in factory automation. The IndraControl XM22 control unit is also suitable for use in marine applications and explosive atmospheres.



### Easy configuration, high-performance data processing

The IndraControl XM embedded control hardware is available for a variety of motion-logic applications. Local connection of the modules of the new IndraControl S20 I/O series expands the control system flexibly for high-performance process linkage. Decentralized I/Os, drives and additional system machinery are connected via Sercos as standard. Additional Ethernet protocols through optional extension modules extend the possibilities of integration. The service-friendly and robust design reduces the maintenance and allows the use in many different applications.



### Advantages resulting from special product features

- ▶ Easy and flexible system configuration with high-performance process data processing
- ▶ Scaled control system with modular and real-time capable I/O expansion
- ▶ Sercos as a universal automation bus for system-wide networking
- ▶ Maintenance-free through the waiving of wear parts such as fans and batteries
- ▶ Robust hardware design with regard to temperature, electromechanics, shock, vibration, EMC
- ▶ Simplified device handling through first touch web server
- ▶ The IndraMotion MLC scalable system firmware for motion logic applications

### Key technical data

- ▶ Protection class: IP20
- ▶ Onboard Sercos master with a minimum cycle time of 250  $\mu$ s
- ▶ High control performance via Intel ATOM (600 MHz or 1,300 MHz)
- ▶ Gigabyte Ethernet, USB, SD card slot, diagnostics LED
- ▶ Modular expansion with extension and I/O modules
- ▶ Extended temperature range from -25 °C to +60 °C
- ▶ Certified solution based on IndraControl XM22 for marine applications and explosive atmospheres

# Technical data

		IndraControl XM21	IndraControl XM22
<b>Processor</b>			
CPU	MHz	600 (Intel E620T)	1300 (Intel E660T)
<b>Memory</b>			
Task/application	MB	512	512
<b>Hardware interfaces</b>			
Ethernet		1 x Ethernet (RJ45)	1 x Ethernet (RJ45)
USB		1 x USB host	1 x USB host
		1 x USB device	1 x USB device
SD card		1 x SD card slot	1 x SD card slot
<b>I/O and functional extension</b>			
IO extension		Connecting IndraControl S20 I/O modules via bus socket modules XA-BS01 or XA-BS02	Connecting IndraControl S20 I/O modules via bus socket modules XA-BS01 or XA-BS02
Functional extension		Connecting IndraControl XM extension modules XFE01.1-xx-xx via control bus socket module XA-BS02	Connecting IndraControl XM extension modules XFE01.1-xx-xx via control bus socket module XA-BS02
Safety		SafeLogic as IndraControl XM extension module XFE01-1-SY-01	SafeLogic as IndraControl XM extension module XFE01-1-SY-01
<b>Fieldbus (protocol)</b>			
Sercos		Master on board	Master on board
PROFIBUS		Master or slave with extension modules	Master or slave with extension modules
PROFINET RT		Controller or device with extension modules	Controller or device with extension modules
EtherNet/IP		Scanner or adapter with extension modules	Scanner or adapter with extension modules
CAN		2 x CAN master with extension modules	2 x CAN master with extension modules
<b>Electrical data</b>			
Supply voltage (U)	V DC	24	24
Maximum permissible voltage range (U <sub>min</sub> - U <sub>max</sub> )	V DC	18 ... 31.2 incl. tolerances	18 ... 31.2 incl. tolerances
<b>Norms and standards</b>			
Certification		CE/UL/CSA	CE/UL/CSA
Marine certification - ABS (American Bureau of Shipping) - BSH (Federal Maritime and Hydrographic Agency of Germany) - BV (Bureau Veritas) - DNV-GL (Det Norske Veritas   Germanischer Lloyd) - LR (Lloyd's Register) - RINA (Registro Italiano Navate)		-	XM2201
Explosion protection IECEX		-	XM2201
<b>Ambient conditions</b>			
Allowable temperature (operation)	°C	-25 ... +60	-25 ... +60
Allowable humidity (operation)	%	5 ... 95 (EN 61131-2)	5 ... 95 (EN 61131-2)
Protection class		IP20	IP20
<b>Load</b>			
Vibration resistance	g	5	5
Shock resistance	g	30	30