

# PMOD 1 XCO 001

## X-CONTROLLER MODULE

### INTELLIGENT PROCESSOR UNIT

The INTRON-X is the modern, modular IP system platform for scalable intercom, PA/GA and PA solutions from INDUSTRONIC.

The fully IP-capable X-Controller is the intelligent processor unit of the INTRON-X system. It distributes audio data and controls and monitors all components of the INTRON-X system (IP, digital, analog).

A variety of integrated software functions, e.g. audio processing as well as SNMP, Modbus TCP and SIP interfaces can be used via activation.

Reliable redundancy concepts ensure continuous operation and maximum system availability.



- Controller for Intercom, PA/GA and PA solutions with up to 400 terminal devices
- Networking of up to 250 X-Controllers
- Control of warning sequences
- 4 Gigabit Ethernet interfaces for flexible network connection
- 12 bidirectional potential-free control inputs and outputs
- Power supply of the internal electronics via PoE (with redundancy) or separate DC supply
- Integrated self-monitoring
- Configuration via INDUSTRONIC management tools

### PLUG-IN DEVICE 1 XCO 001

Type number	344-001-100
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### MECHANICAL DATA

Mounting	1/3 19" width in a 1 RU INTRON-X 19" chassis of type 3 XRC 001
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Width x height x depth	147 mm x 44 mm x 265 mm (5.79" x 1.73" x 10.43")
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Weight	Approx. 1.1 kg (approx. 2.43 lbs)
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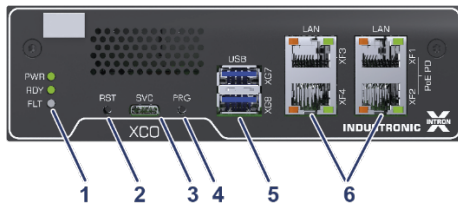
### POWER CONSUMPTION (XD1 OR POE)

Typical	6 W
Maximum	15 W

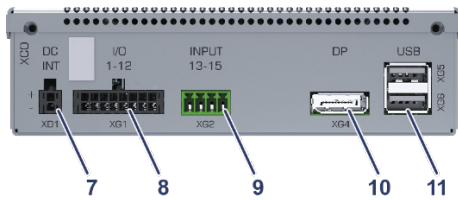
### DC POWER SUPPLY (XD1)

Power supply	42 V DC to 72 V DC
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## FRONT/REAR



- |   |                           |
|---|---------------------------|
| 1 | LEDs for operating status |
| 2 | Reset button              |
| 3 | Service interface (USB-C) |
| 4 | Service button            |
| 5 | USB-3.0 interfaces        |
| 6 | Ethernet interfaces       |



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|----|--|
| 7  | DC power supply  |
| 8  | Interface to terminal block 12 XIOTB 001 (I/O 1 to 12) |
| 9  | Inputs 13 to 15  |
| 10 | Display port   |
| 11 | USB-2.0 interfaces                                     |

## CONTROL INPUTS/OUTPUTS (XG1)

<b>Quantity</b>	12 with the same reference and power supply potential
<b>Input voltage level of each input</b>	Off: 0 V DC to 5 V DC On: 10 V DC to 72 V DC (current consumption max. 2 mA)
<b>Voltage and current value for each output</b>	Max. 72 V DC, 100 mA
<b>Power supply</b>	Max. 72 V DC Supplied via the I/O terminal block, max. 2.5 A

## CONTROL INPUTS (XG2)

<b>Quantity</b>	3 with the same reference and power supply potential, 4-pole plug-in terminal block with push-in terminals, 1.3 mm <sup>2</sup>
<b>Input voltage level of each input</b>	Off: 0 V DC to 5 V DC On: 10 V DC to 72 V DC (current consumption max. 2 mA)

## NETWORK INTERFACES (XF1, XF2, XF3, XF4)

<b>Quantity</b>	4 x RJ45
<b>Type</b>	100Base-T/1000Base-T Ethernet IEEE 802.3
<b>PoE (only XF1, XF2)</b>	IEEE 802.3at, Class 4, 25.5 W
<b>Requirements</b>	IPv4 network Support of UDP, TCP, SCTP, RTP and RTCP protocols Quality of Service (QoS) Ideal latency value < 20 ms (max. 50 ms) Jitter: max. 10 ms 1 MBit/s basic bandwidth and 200 kBit/s per active audio channel

## USB INTERFACE (XG5, XG6, XG7, XG8)

<b>Quantity</b>	4 x USB (type A)
<b>Type</b>	USB 2.0 (XG5, XG6) USB 3.0 (XG7, XG8) Max. 500 mA each

## SERVICE INTERFACE (SVC)

<b>Quantity</b>	1 x USB-C (USB 2.0)
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## ENVIRONMENTAL REQUIREMENTS AND STANDARDS

<b>Ambient temperature during operation</b>	-15 °C to +55 °C (+5 °F to -131 °F)
<b>Storage temperature</b>	-25 °C to +70 °C (-13 °F to +158 °F)
<b>Relative humidity (non-condensing)</b>	Max. 95 %
<b>Degree of protection</b>	IP20
<b>Vibration resistance</b>	2 Hz to 13.2 Hz, +/-1.5 mm, 13.2 Hz to 200 Hz, 1 g
<b>Operating altitude</b>	Max. 2,000 m (6,562 ft) above sea level
<b>Pollution degree</b>	2 (according to EN 62368-1)
<b>Electrical safety</b>	EN 62368-1
<b>EMC</b>	EN 61000-6-2, EN 61000-6-4, EN 55032 Class B, EN 55035, EN 50130-4

## ACCESSORIES



### 12 XIOTB 001

Terminal block for 12 control inputs and outputs

<b>Mounting</b>	DIN rail
<b>Width x height x depth</b>	50 mm x 128 mm x 46 mm (1.97" x 5.04" x 1.81")
<b>Power supply (XD1 and XD2)</b>	42 V DC to 72 V DC, max. 16 A, 2 x 4 poles, cascable
<b>Control inputs/outputs (XG2 and XG3)</b>	Incl. reference and supply potential 2 x 8-pole push-in terminals, 1.5 mm <sup>2</sup> , max. 2.5 A
<b>Type number</b>	344-020-102



### 16 XCBL 121 3.5 m LSZH-FR

Cable to connect the XCO to XIOTB, 16 poles, 3.5 m (11.48 ft), 0.14 mm<sup>2</sup>, connectors overmolded on both sides, halogen-free, flame-retardant

<b>Type number</b>	244-900-351
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Further cable lengths available upon request



### 4 XCBL 531 3.5 m LSZH-FR

Power supply cable for the terminal block XIOTB, 4 poles, 3.5 m (11.48 ft), 0.75 mm<sup>2</sup>, 1 x connector covered with heat-shrink tube, 1 x flying leads, halogen-free, flame-retardant

<b>Type number</b>	244-905-351
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Further cable lengths available upon request



#### 4 XCBL 531 3.5 m

Power supply cable for the terminal block XIOTB, 4 poles, 3.5 m (11.48 ft), 0.75 mm<sup>2</sup>, 1 x connector covered with heat-shrink tube, 1 x flying leads

**Type number**

244-955-351

Further cable lengths available upon request



#### 2 XCBL 421 1.5 m

Power supply cable for the plug-in device 1 XCO 001, 2 poles, 1.5 m (4.92 ft), 0.5 mm<sup>2</sup>, connectors on both sides, halogen-free, flame-retardant

**Type number**

244-902-151

Further cable lengths available upon request

## PREFERRED MODULES

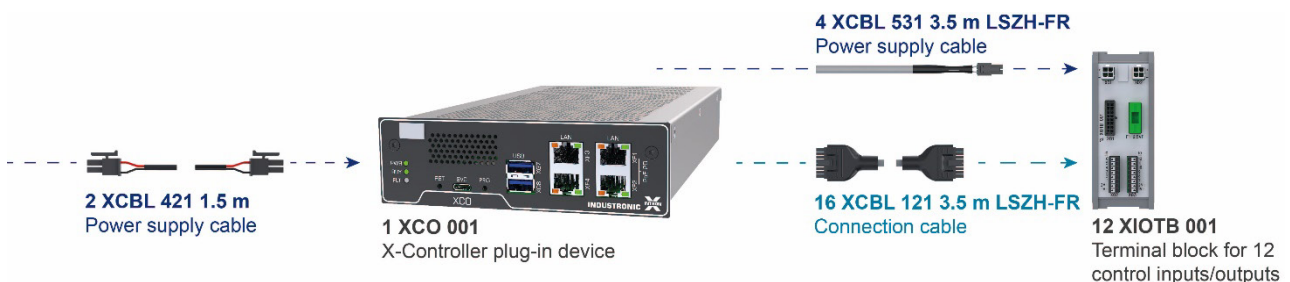
### PMOD 1 XCO 001/1

X-Controller plug-in device without terminal block for external control inputs or outputs.



### PMOD 1 XCO 001/2

X-Controller plug-in device incl. additional terminal block and connection cables for up to 12 external control inputs or outputs.



## OVERVIEW PREFERRED MODULES

	PMOD 1 XCO 001/1	PMOD 1 XCO 001/2
Plug-in device 1 XCO 001	x	x
Terminal block 12 XIOTB 001		x
Cable 16 XCBL 121 LSZH-FR		x
Cable 2 XCBL 421	x	x
Cable 4 XCBL 531 LSZH-FR		x
Type number	326-001-001	326-001-002

## ACTIVATIONS

**Please note:** To commission the module, INDUSTRONIC activations are required!

	ACT-Controller XCO	ACT-Controller Redundancy
Description	Activation of one X-Controller with standard functions	Activation of redundancy functions for Hot Standby System or A+B System (optional)
Type number	101-100-010	101-100-020

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