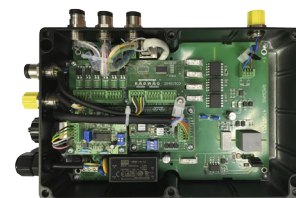


# IM01.EX Communication Module

Expanded Interfaces of HX5.EX Indicator

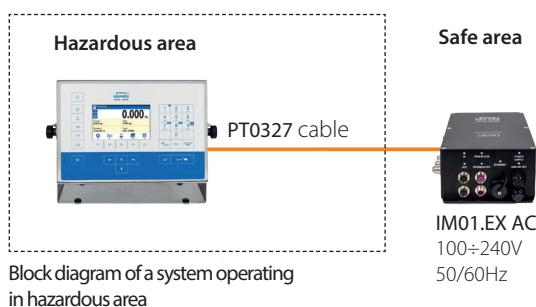


Communication interfaces



Electronic components in a hermetic housing

IM01.EX



## Functions



## Features

### Accessories for PUE HX5.EX indicator

The indicator can be connected to the following accessories: barcode scanners, printers, external displays, control buttons, stack lights and other controlling/signalling devices. The indicator enables establishing communication with systems of automatic adjustment and control of industrial processes, and with superior IT systems.

### Operation in Safe Area

IM01.EX module is installed outside the hazardous area, and connected to the indicator using intrinsically safe interface.

## Technical Specifications

	IM01.EX-1	IM01.EX-2	IM01.EX-3
<b>Housing material</b>	Powder-coated aluminium	Powder-coated aluminium	Powder-coated aluminium
<b>Ingress protection</b>	IP66 / IP68 (1.5 m)	IP66 / IP68 (1.5 m)	IP66 / IP68 (1.5 m)
<b>EX approval</b>	ATEX: TEST 18 ATEX 0010X IECEX: OBAC 19.0002X	ATEX: TEST 18 ATEX 0010X IECEX: OBAC 19.0002X	ATEX: TEST 18 ATEX 0010X IECEX: OBAC 19.0002X
<b>EX marking</b>	II (2)G [Ex ib] IIC Gb II (2)D [Ex ib] IIIC Db	II (2)G [Ex ib] IIC Gb II (2)D [Ex ib] IIIC Db	II (2)G [Ex ib] IIC Gb II (2)D [Ex ib] IIIC Db
<b>RS 232</b>	2 × type M12 8 PIN	2 × type M12 8 PIN	2 × type M12 8 PIN
<b>USB (HOST)</b>	1 × type M12 4 PIN	1 × type M12 4 PIN	1 × type M12 4 PIN
<b>Ethernet 10/100 MBit</b>	1 × type RJ45	1 × type RJ45	1 × type RJ45
<b>PROFIBUS DP SLAVE Module</b>	—	—	—
<b>PROFINET SLAVE Module</b>	—	—	—
<b>CANopen</b>	—	—	—
<b>DeviceNet</b>	—	—	—
<b>RS 485</b>	—	—	—
<b>EtherNet/IP</b>	—	—	—
<b>IN/OUT*</b>	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	12 × IN, 12 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)
<b>Analog outputs**</b>	—	1	—
<b>Power supply</b>	100-240VAC 50/60Hz	100-240VAC 50/60Hz	100-240VAC 50/60Hz
<b>Power consumption</b>	10 W	10 W	10 W
<b>Operating temperature</b>	-20 ÷ +40 °C	-20 ÷ +40 °C	-20 ÷ +40 °C
<b>Air relative humidity **</b>	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
<b>Transport and storage temperature</b>	-20 ÷ +60 °C	-20 ÷ +60 °C	-20 ÷ +60 °C
<b>Power supply dimensions</b>	222 × 146 × 82 mm	222 × 146 × 82 mm	222 × 146 × 82 mm
<b>Net weight</b>	1.9 kg	1.9 kg	1.9 kg
<b>Gross weight</b>	2.5 kg	2.5 kg	2.5 kg
<b>Packaging dimensions</b>	346 × 216 × 135 mm	346 × 216 × 135 mm	346 × 216 × 135 mm

\* for the following modes – 0-10V, 4-20mA, 0-20mA, 0-24mA

\*\* non-condensing conditions

## Technical Specifications

	IM01.EX-4	IM01.EX-5	IM01.EX-8
<b>Housing material</b>	Powder-coated aluminium	Powder-coated aluminium	Powder-coated aluminium
<b>Ingress protection</b>	IP66 / IP68 (1.5 m)	IP66 / IP68 (1.5 m)	IP66 / IP68 (1.5 m)
<b>EX approval</b>	ATEX: TEST 18 ATEX 0010X IECEX: OBAC 19.0002X	ATEX: TEST 18 ATEX 0010X IECEX: OBAC 19.0002X	ATEX: TEST 18 ATEX 0010X IECEX: OBAC 19.0002X
<b>EX marking</b>	II (2)G [Ex ib] IIC Gb II (2)D [Ex ib] IIIC Db	II (2)G [Ex ib] IIC Gb II (2)D [Ex ib] IIIC Db	II (2)G [Ex ib] IIC Gb II (2)D [Ex ib] IIIC Db
<b>RS 232</b>	2 × type M12 8 PIN	2 × type M12 8 PIN	2 × type M12 8 PIN
<b>USB (HOST)</b>	1 × type M12 4 PIN	1 × type M12 4 PIN	1 × type M12 4 PIN
<b>Ethernet 10/100 MBit</b>	1 × type RJ45	—	1 × type RJ45
<b>PROFIBUS DP SLAVE Module</b>	1 × type IN / 1 × type OUT	—	—
<b>PROFINET SLAVE Module</b>	—	1 × type RJ45	—
<b>CANopen</b>	—	—	—
<b>DeviceNet</b>	—	—	—
<b>RS 485</b>	—	—	cable 3 m
<b>EtherNet/IP</b>	—	—	—
<b>IN/OUT*</b>	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)
<b>Analog outputs**</b>	—	—	—
<b>Power supply</b>	100-240VAC 50/60Hz	100-240VAC 50/60Hz	100-240VAC 50/60Hz
<b>Power consumption</b>	10 W	10 W	10 W
<b>Operating temperature</b>	-20 ÷ +40 °C	-20 ÷ +40 °C	-20 ÷ +40 °C
<b>Air relative humidity **</b>	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
<b>Transport and storage temperature</b>	-20 ÷ +60 °C	-20 ÷ +60 °C	-20 ÷ +60 °C
<b>Power supply dimensions</b>	222 × 146 × 82 mm	222 × 146 × 82 mm	222 × 146 × 82 mm
<b>Net weight</b>	1.9 kg	1.9 kg	1.9 kg
<b>Gross weight</b>	2.5 kg	2.5 kg	2.5 kg
<b>Packaging dimensions</b>	346 × 216 × 135 mm	346 × 216 × 135 mm	346 × 216 × 135 mm

\* for the following modes – 0-10V, 4-20mA, 0-20mA, 0-24mA

\*\* non-condensing conditions

## Technical Specifications

### IM01.EX-9

<b>Housing material</b>	Powder-coated aluminium
<b>Ingress protection</b>	IP66 / IP68 (1.5 m)
<b>EX approval</b>	ATEX: TEST 18 ATEX 0010X IECEX: OBAC 19.0002X
<b>EX marking</b>	II (2)G [Ex ib] IIC Gb II (2)D [Ex ib] IIIC Db
<b>RS 232</b>	2 × type M12 8 PIN
<b>USB (HOST)</b>	1 × type M12 4 PIN
<b>Ethernet 10/100 MBit</b>	1 × type RJ45
<b>PROFIBUS DP SLAVE Module</b>	—
<b>PROFINET SLAVE Module</b>	—
<b>CANopen</b>	—
<b>DeviceNet</b>	—
<b>RS 485</b>	—
<b>EtherNet/IP</b>	1 × gniazdo RJ45
<b>IN/OUT*</b>	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)
<b>Analog outputs**</b>	—
<b>Power supply</b>	100-240VAC 50/60Hz
<b>Power consumption</b>	10 W
<b>Operating temperature</b>	-20 ÷ +40 °C
<b>Air relative humidity **</b>	10 ÷ 85%
<b>Transport and storage temperature</b>	-20 ÷ +60 °C
<b>Power supply dimensions</b>	222 × 146 × 82 mm
<b>Net weight</b>	1.9 kg
<b>Gross weight</b>	2.5 kg
<b>Packaging dimensions</b>	346 × 216 × 135 mm

\* for the following modes – 0-10V, 4-20mA, 0-20mA, 0-24mA

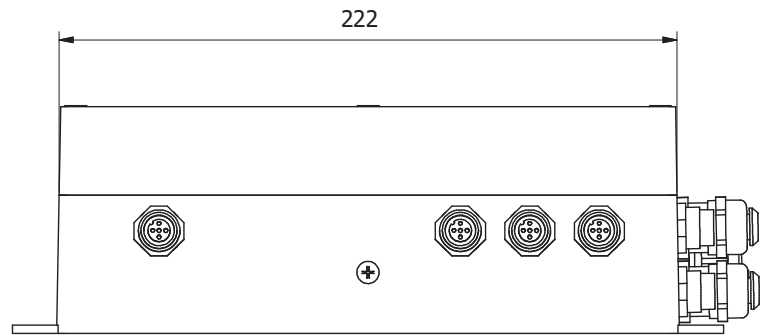
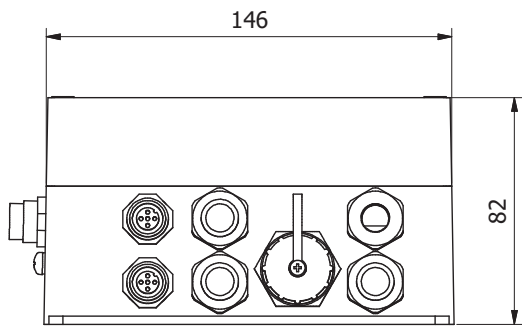
\*\* non-condensing conditions

## Interface configuration table

TYPE	INTERFACES					
	RS232	USB	ETHERNET	PROFIBUS	PROFINET	ANALOG
<b>IM01.EX-1</b>	2 x RS232	USB	ETHERNET		4IN / 4OUT	
<b>IM01.EX-2</b>	2 x RS232	USB	ETHERNET		4IN / 4OUT	Analog outputs
<b>IM01.EX-3</b>	2 x RS232	USB	ETHERNET		12IN / 12OUT	
<b>IM01.EX-3/2</b>	2 x RS232	USB	ETHERNET		12IN / 12OUT	Analog outputs
<b>IM01.EX-4</b>	2 x RS232	USB	ETHERNET	PROFIBUS	4IN / 4OUT	
<b>IM01.EX-4/2</b>	2 x RS232	USB	ETHERNET	PROFIBUS	4IN / 4OUT	Analog outputs
<b>IM01.EX-4/3</b>	2 x RS232	USB	ETHERNET	PROFIBUS	12IN / 12OUT	
<b>IM01.EX-4/3/2</b>	2 x RS232	USB	ETHERNET	PROFIBUS	12IN / 12OUT	Analog outputs
<b>IM01.EX-5</b>	2 x RS232	USB		PROFINET	4IN / 4OUT	
<b>IM01.EX-5/2</b>	2 x RS232	USB		PROFINET	4IN / 4OUT	Analog outputs
<b>IM01.EX-5/3</b>	2 x RS232	USB		PROFINET	12IN / 12OUT	
<b>IM01.EX-5/3/2</b>	2 x RS232	USB		PROFINET	12IN / 12OUT	Analog outputs
<b>IM01.EX-8</b>	2 x RS232	USB	ETHERNET	RS 485	4IN / 4OUT	
<b>IM01.EX-8/2</b>	2 x RS232	USB	ETHERNET	RS 485	4IN / 4OUT	Analog outputs
<b>IM01.EX-8/3</b>	2 x RS232	USB	ETHERNET	RS 485	12IN / 12OUT	
<b>IM01.EX-8/3/2</b>	2 x RS232	USB	ETHERNET	RS 485	12IN / 12OUT	Analog outputs
<b>IM01.EX-9</b>	2 x RS232	USB		ETHERNET IP	4IN / 4OUT	
<b>IM01.EX-9/2</b>	2 x RS232	USB		ETHERNET IP	4IN / 4OUT	Analog outputs
<b>IM01.EX-9/3</b>	2 x RS232	USB		ETHERNET IP	12IN / 12OUT	
<b>IM01.EX-9/3/2</b>	2 x RS232	USB		ETHERNET IP	12IN / 12OUT	Wyjścia analogowe

## Dimensions

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IM01.EX

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## Accessories

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### Cables, Converters

- PT0019 cable – (scale – Epson printer)
- PT0022 – cable (scale - Zebra printer)
- USB – PT0087 cable (Epson printer)
- USB cable
- PT0020 cable – (scale– computer)
- IN/OUT– PT0256 cable
- RS 485 – PT0328 cable for PUE HX5.EX indicator.
- RS 232 – PT0329 cable for PUE HX5.EX indicator.
- PT0084 cable, USB connector