

Stainless Steel HX5.EX-1 HR Platform Scale for Hazardous Areas



Speed and accuracy of the weighing process and safety of the operation in gas and dust hazardous areas and in aggressive environment



HX5.EX.H-1.HR



Intrinsically safe communication interfaces and hermetic connectors in stainless steel housing



ATEX approval



PUE HX5.EX-1 indicator with 5" colour graphic display

Functions



Parts counting



Percent weighing



GLP procedures



Labelling



Replaceable units



+/- control



Statistics



Alibi memory



ATEX certificate



Multilingual menu



Dosing

Features

Precise Weighing Indications in Challenging Industrial Conditions

HX5.EX-1 platform scale enables fast and precise mass measurements in challenging industrial conditions.

Safety and Resistance to Ambient Conditions

Robust design made of stainless steel for versatile weighing processes ensures safety of the operation in hazardous areas classified as zones 1, 2, 21 and 22. Rustproof load cell and corrosion resistant stainless steel enable using the scale in the most challenging conditions and aggressive environments.

Versatility of Use

HX5.EX-1 scale can be applied in various industry areas, apart from standard weighing processes it allows to carry out parts counting, checkweighing, labelling, dosing and statistics operations. This enables applying the scale in various industries.

Cooperation with PUE HX5.EX Indicator

The scale is operated via advanced PUE HX5.EX indicator with a hermetic stainless steel housing. ATEX certificate guarantees safe operation of the indicator in hazardous areas.

Uncomplicated Operation and Clearly Presented Indications

5" colour screen ensures perfect readability, and intuitive information arrangement on the display guarantees uncomplicated and comfortable operation. Graphic user interface with the option of customization via widgets also adds to the comfort of operation.

Certified Intrinsically Safe Power Supply

The scale must be powered using exclusively a certified intrinsically safe power supply. Two versions of intrinsically safe power supply are offered, one for operation in hazardous area (PM01.EX-1 power supply), one in safe area (PM01.EX-2 power supply).

Cooperation with External Devices

With use of IM01.EX communication module it is possible to expand communication interfaces range. The module facilitates cooperation with various accessories, e.g. barcode scanners, printers, controlling/signalling devices.

Technical Specifications

	HX5.EX-1.3.HR2	HX5.EX-1.6.HR2*	HX5.EX-1.15.HR2*
Maximum capacity [Max]	3 kg	6 kg	15 kg
Minimum capacity	20 g	40 g	100 g
Readability [d]	1 g	2 g	5 g
Max readability for non-verified scale	0.2 g	0.2 g	0.5 g
Verification unit [e]	1 g	2 g	5 g
Tare range	−3 kg	−6 kg	−15 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
ATEX marking	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Weighing pan material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	−10 ÷ +40 °C	−10 ÷ +40 °C	−10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	−10 ÷ +50 °C	−10 ÷ +50 °C	−10 ÷ +50 °C
Weighing pan dimensions	250 × 300 mm	250 × 300 mm	250 × 300 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	13.8 kg	13.8 kg	13.8 kg
Gross weight****	15.7 kg	15.7 kg	15.7 kg
Platform packaging dimensions	580 × 320 × 360 mm	580 × 320 × 360 mm	580 × 320 × 360 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument

** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

*** non-condensing conditions

**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.30.HR2*	HX5.EX-1.6.HR3	HX5.EX-1.15.HR3*
Maximum capacity [Max]	30 kg	6 kg	15 kg
Minimum capacity	200 g	40 g	100 g
Readability [d]	10 g	2g	5 g
Max readability for non-verified scale	1 g	0.2 g	0.5 g
Verification unit [e]	10 g	2 g	5 g
Tare range	−30 kg	−6 kg	−15 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
ATEX marking	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Weighing pan material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	−10 ÷ +40 °C	−10 ÷ +40 °C	−10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	−10 ÷ +50 °C	−10 ÷ +50 °C	−10 ÷ +50 °C
Weighing pan dimensions	250 × 300 mm	410 × 410 mm	410 × 410 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	13.8 kg	15.8 kg	15.8 kg
Gross weight****	15.7 kg	18.7 kg	18.7 kg
Platform packaging dimensions	580 × 320 × 360 mm	670 × 510 × 330 mm	670 × 510 × 330 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument

** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

*** non-condensing conditions

**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.30.HR3*	HX5.EX-1.60.HR3*	HX5.EX-1.150.HR3*
Maximum capacity [Max]	30 kg	60 kg	150 kg
Minimum capacity	200 g	400 g	1000 g
Readability [d]	10 g	20 g	50 g
Max readability for non-verified scale	1 g	2 g	5 g
Verification unit [e]	10 g	20 g	50 g
Tare range	−30 kg	−60 kg	−150 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
ATEX marking	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Weighing pan material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	−10 ÷ +40 °C	−10 ÷ +40 °C	−10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	−10 ÷ +50 °C	−10 ÷ +50 °C	−10 ÷ +50 °C
Weighing pan dimensions	410 × 410 mm	410 × 410 mm	410 × 410 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	15.8 kg	15.8 kg	15.8 kg
Gross weight****	18.7 kg	18.7 kg	18.7 kg
Platform packaging dimensions	670 × 510 × 330 mm	670 × 510 × 330 mm	670 × 510 × 330 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument

** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

*** non-condensing conditions

**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.15.HR4	HX5.EX-1.30.HR4*	HX5.EX-1.60.HR4*
Maximum capacity [Max]	15 kg	30 kg	60 kg
Minimum capacity	100 g	200 g	400 g
Readability [d]	5 g	10 g	20 g
Max readability for non-verified scale	0.5 g	1 g	2 g
Verification unit [e]	5 g	10 g	20 g
Tare range	–15 kg	–30 kg	–60 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
ATEX marking	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Weighing pan material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C	–10 ÷ +50 °C
Weighing pan dimensions	500 × 500 mm	500 × 500 mm	500 × 500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	22.2 kg	22.2 kg	22.2 kg
Gross weight****	25.9 kg	25.9 kg	25.9 kg
Platform packaging dimensions	840 × 600 × 400 mm	840 × 600 × 400 mm	840 × 600 × 400 mm
Indicator packaging dimensions	670 × 510 × 330 mm	670 × 510 × 330 mm	670 × 510 × 330 mm

* option: dual range weighing instrument

** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

*** non-condensing conditions

**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.150.HR4*	HX5.EX-1.15.HR3/5	HX5.EX-1.30.HR3/5*
Maximum capacity [Max]	150 kg	15 kg	30 kg
Minimum capacity	1000 g	100 g	200 kg
Readability [d]	50 g	5 g	10 g
Max readability for non-verified scale	5 g	0.5 g	1 g
Verification unit [e]	50 g	5 g	10 g
Tare range	−150 kg	−15 kg	−30 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
ATEX marking	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Weighing pan material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	−10 ÷ +40 °C	−10 ÷ +40 °C	−10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	−10 ÷ +50 °C	−10 ÷ +50 °C	−10 ÷ +50 °C
Weighing pan dimensions	500 × 500 mm	400 × 600 mm	400 × 600 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	22.2 kg	22.7 kg	22.7 kg
Gross weight****	25.9 kg	26.4 kg	26.4 kg
Platform packaging dimensions	840 × 600 × 400 mm	670 × 510 × 330 mm	670 × 510 × 330 mm
Indicator packaging dimensions	670 × 510 × 330 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument

** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

*** non-condensing conditions

**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.60.HR3/5*	HX5.EX-1.150.HR3/5*	HX5.EX-1.15.HR5
Maximum capacity [Max]	60 kg	150 kg	15 kg
Minimum capacity	400 g	1000 g	100 g
Readability [d]	20 g	50 g	5 g
Max readability for non-verified scale	2 g	5 g	1 g
Verification unit [e]	20 g	50 g	5 g
Tare range	-60 kg	-150 kg	-15 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
ATEX marking	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Weighing pan material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	-10 ÷ +40 °C	-10 ÷ +40 °C	-10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	-10 ÷ +50 °C	-10 ÷ +50 °C	-10 ÷ +50 °C
Weighing pan dimensions	400 × 600 mm	400 × 600 mm	600 × 600 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	22.7 kg	22.7 kg	24.9 kg
Gross weight****	26.4 kg	26.4 kg	29.1 kg
Platform packaging dimensions	670 × 510 × 330 mm	670 × 510 × 330 mm	840 × 700 × 400 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument

** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

*** non-condensing conditions

**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.30.HR5*	HX5.EX-1.60.HR5*	HX5.EX-1.150.HR5*
Maximum capacity [Max]	30 kg	60 kg	150 kg
Minimum capacity	200 g	400 g	1000 g
Readability [d]	10 g	20 g	50 g
Max readability for non-verified scale	1 g	2 g	5 g
Verification unit [e]	10 g	20 g	50 g
Tare range	−30 kg	−60 kg	−150 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
ATEX marking	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db	II 2G Ex ib IIB T4 Gb, II 2D Ex ib IIIC T135°C Db
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Weighing pan material	AISI316 stainless steel	AISI316 stainless steel	AISI316 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	−10 ÷ +40 °C	−10 ÷ +40 °C	−10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	−10 ÷ +50 °C	−10 ÷ +50 °C	−10 ÷ +50 °C
Weighing pan dimensions	600 × 600 mm	600 × 600 mm	600 × 600 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	24.9 kg	24.9 kg	24.9 kg
Gross weight****	29.1 kg	29.1 kg	29.1 kg
Platform packaging dimensions	840 × 700 × 400 mm	840 × 700 × 400 mm	840 × 700 × 400 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

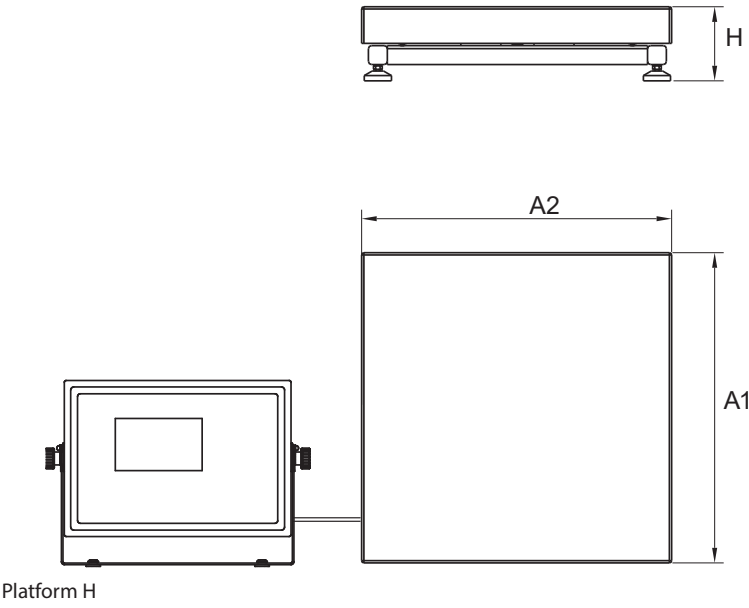
* option: dual range weighing instrument

** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

*** non-condensing conditions

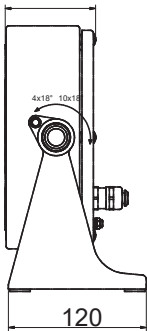
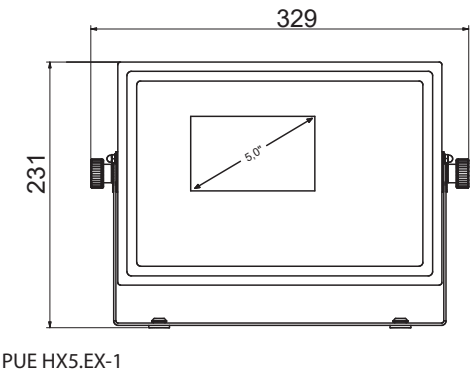
**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

Dimensions



Scale type	A1	A2	H
HX5.EX-1.HR2	250	300	103 ± 3
HX5.EX-1.HR3	410	410	98 ± 2
HX5.EX-1.HR4	500	500	155 ± 5
HX5.EX-1.HR3/5	400	600	155 ± 5
HX5.EX-1.HR5	600	600	155 ± 5

dimensions in mm



Accessories

Peripheral Devices

- IM01EX-1 communication module

Electrical Accessories

- PM01.EX-1 power supply (for operation in hazardous area)
- PM01.EX-2 power supply (for operation in safe area)

Remaining accessories

- stands for indicators

Dedicated Software

R-LAB

- collecting measurements
- carrying out statistical analysis of measurements
- customized graphs and reports

E2R Weighing Records

- complete, automated databases synchronization
- fully supported processes of labelling and parts counting
- record of weighings, weighings archiving

Radwag Development Studio

- presentation of functions (and subfunctions) of communication protocol (Common Communication Protocol)
- possibility of connection with weighing equipment on which each function is carried out,
- library with mass control, contained within the development environment
- complete documentation of the communication protocol
- set of user manuals for different solutions addressed for programmers employed in companies using RADWAG-manufactured weighing equipment

RADWAG Connect

- establishing communication with all balances, scales and weighing modules using Common Communication Protocol

- communication via local network,
- support of basic functions
- auto searching for devices
- connecting with few devices simultaneously, swapping between them
- clear list of connected platforms
- record of measurements in the program,
- export of carried out measurements to CSV file,
- work performed using freely selected device with Windows 10 operating system

RAD KEY

- Establishing cooperation between a weighing instrument and a computer

R.Barcode

- The basic function software is presentation of the data sent by barcode scanners connected to PC via USB or RS232

LabView Driver

- operation of RADWAG balances in LabView environment