

Stainless Steel HX5.EX-1/4N H Ramp Scale for Hazardous Areas



Accuracy of the weighing process of large and heavy loads
in gas and dust hazardous areas and in aggressive environment



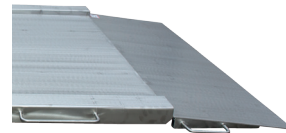
HX5.EX 1.4N



Intrinsically safe communication
interfaces and hermetic
connectors in stainless steel
housing



ATEX approval



Ramps enable easy loading of
the weighing platform



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

Mass measurement carried out using 4 load cells guarantees weighing accuracy regardless positioning of the load on the platform. The scale ensures precise and fast mass measurement in challenging industrial conditions.

Safety and Resistance to Ambient Conditions

Robust platform made of powder-coated steel allows to operate large loads in moist environment and at direct contact with water. The scale ensures safety of operation in hazardous areas classified as zones 1, 2, 21 and 22.

Versatility of Use

Ramps enable easy loading and unloading of large loads transported onto the weighing platform using trolleys.

Cooperation with PUE HX5.EX Indicator

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

Customizable Instrument

Numerous variants of weighing pan dimensions and broad range of maximum capacities enable selecting the best weighing instrument suiting specific requirements and needs.

Uncomplicated Operation and Clear Presentation of 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-1.4N.60.H1	HX5.EX-1.4N.150.H1*	HX5.EX-1.4N.300.H1*
Maximum capacity [Max]	60 kg	150 kg	300 kg
Minimum capacity	0.4 kg	1 kg	2 kg
Readability [d]	20 g	50 g	100 g
Max readability for non-verified scale	20 g	20 g	20 g
Verification unit [e]	20 g	50 g	100 g
Tare range	-60 kg	-150 kg	-300 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X
EX 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	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	3 m cable	3 m cable	3 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
Communication protocol	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP
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	840 × 860 mm	840 × 860 mm	840 × 860 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	110 kg	110 kg	110 kg
Gross weight****	140 kg	140 kg	140 kg
Platform packaging dimensions	1250 × 950 × 508 mm	1250 × 950 × 508 mm	1250 × 950 × 508 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

Technical Specifications

	HX5.EX-1.4N.600.H1*	HX5.EX-1.4N.150.H2*	HX5.EX-1.4N.300.H2*
Maximum capacity [Max]	600 kg	150 kg	300 kg
Minimum capacity	4 kg	1 kg	2 kg
Readability [d]	200 g	50 g	100 g
Max readability for non-verified scale	50 g	20 g	20 g
Verification unit [e]	200 g	50 g	100 g
Tare range	−600 kg	−150 kg	−300 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X
EX 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	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	3 m cable	3 m cable	3 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 67	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
Communication protocol	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP
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	840 × 860 mm	1100 × 1200 mm	1100 × 1200 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	110 kg	155 kg	155 kg
Gross weight****	140 kg	190 kg	190 kg
Platform packaging dimensions	1250 × 950 × 508 mm	1500 × 1300 × 508 mm	1500 × 1300 × 508 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

Technical Specifications

	HX5.EX-1.4N.600.H2*	HX5.EX-1.4N.1500.H2*	HX5.EX-1.4N.300.H3*
Maximum capacity [Max]	600 kg	1500 kg	300 kg
Minimum capacity	4 kg	10 kg	2 kg
Readability [d]	200 g	500 g	100 g
Max readability for non-verified scale	50 g	100 g	50 g
Verification unit [e]	200 g	500 g	100 g
Tare range	-600 kg	-1500 kg	-300 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X
EX 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	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	3 m cable	3 m cable	3 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
Communication protocol	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP
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	1100 × 1200 mm	1100 × 1200 mm	1200 × 1500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	155 kg	195 kg	185 kg
Gross weight****	190 kg	230 kg	225 kg
Platform packaging dimensions	1500 × 1300 × 508 mm	1500 × 1300 × 508 mm	1600 × 1600 × 508 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

Technical Specifications

	HX5.EX-1.4N.600.H3*	HX5.EX-1.4N.1500.H3*	HX5.EX-1.4N.300.H4*
Maximum capacity [Max]	600 kg	1500 kg	300 kg
Minimum capacity	4 kg	10 kg	2 kg
Readability [d]	200 g	500 g	100 g
Max readability for non-verified scale	50 g	100 g	50 g
Verification unit [e]	200 g	500 g	100 g
Tare range	–600 kg	–1500 kg	–300 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X
EX 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	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	3 m cable	3 m cable	3 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
Communication protocol	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP
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	1200 × 1500 mm	1200 × 1500 mm	1500 × 1500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	185 kg	235 kg	275 kg
Gross weight****	225 kg	275 kg	315 kg
Platform packaging dimensions	1600 × 1600 × 508 mm	1600 × 1600 × 508 mm	1900 × 1600 × 508 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

Technical Specifications

	HX5.EX-1.4N.600.H4*	HX5.EX-1.4N.1500.H4*
Maximum capacity [Max]	600 kg	1500 kg
Minimum capacity	4 kg	10 kg
Readability [d]	200 g	500 g
Max readability for non-verified scale	50 g	100 g
Verification unit [e]	200 g	500 g
Tare range	–600 kg	–1500 kg
Verification	Yes	Yes
OIML class	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEX OBAC 19.0001X
EX 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
Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Platform material	AISI304 stainless steel	AISI304 stainless steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	3 m cable	3 m cable
Display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 68	IP 68
Ingress protection - indicator	IP 66/68	IP 66/68
RS 232	2	2
RS 485	1	1
Communication protocol	ASCII Text / Modbus RTU / TCP	ASCII Text / Modbus RTU / TCP
Power supply**	230V AC	230V AC
Power consumption	15 W	15 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C
Weighing pan dimensions	1500 × 1500 mm	1500 × 1500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	275 kg	275 kg
Gross weight****	315 kg	315 kg
Platform packaging dimensions	1900 × 1600 × 508 mm	1900 × 1600 × 508 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

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