# Stainless Steel HX5.EX-1.4P H Pallet Scale for Hazardous Areas



Precise weighing of loads on transport pallets in gas and dust hazardous areas and in moist environment







Intrinsically safe communication interfaces and hermetic connectors in stainless steel housing



ATEX approval



Transport-supporting casters



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

# HX5.EX 1.4P.H

**Functions** 



Parts counting







Dosing





Statistics





Alibi memory



Labelling





Replaceable



Multilingual menu

#### **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.

#### Reliability and Safety

Robust platform made of powder-coated steel allows to weight large loads, ensuring durability and endurance in everyday use. The scale ensures safety of operation in hazardous areas classified as zones 1 and 2.

#### Wide Range of Applications

Unique shape of the weighing platform facilitates weighing Euro-pallets and any types of transport pallets of 800 x 1200 mm dimensions. The scale enables loading the weighing pan using forklift.

### 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.

# **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.

#### **Ergonomics and Comfort of Operation**

Resistant casters and holders support scale transport.

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# **Technical Specifications**

Minimum capacity		HX5.EX-1.4P.600.H	HX5.EX-1.4P.1500.H*	HX5.EX-1.4P.3000.H.C*
Max readability for   200 g   500 g   1000 g	Maximum capacity [Max]	600 kg	1500 kg	3000 kg
Max readability for   200 g   500 g   1000 kg   1500	Minimum capacity	4 kg	10 kg	20 kg
Non-verified scale   Verification unit (e)	Readability [d]	200 g	500 g	1000 g
Tare range	Max readability for non-verified scale	200 g	500 g	1000 g
Verification         Yes         Yes         Yes           OIML class         III         III         III           EX approval         ATEX: KDB 17ATEX0066X IECEX: IECEX OBAC 19,0001X         ATEX: KDB 17ATEX0066X         ATEX: KDB 17ATEX0066X           EX marking         II 2G Ex ib IIB T4 Gb, II 2D Ex ib III T135°C Db         II 2G Ex ib IIB T4 Gb, III 2D Ex ib III T4 Gb, III 2D Ex ib III T135°C Db         II 2G Ex ib IIB T4 Gb, III 2D Ex ib III T135°C Db         II 2D Ex ib III 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           Meighing pan material         AISI304 stainless steel         AISI304 stainless steel         AISI304 stainless steel           Indicator fastening         3 m cable         3 m cable         3 m cable         3 m cable           Indicator fastening         5° graphic display         5° graphic display         6° graphic display           Keyboard         membrane, 35 keys         membrane, 35 keys         membrane, 35 keys           Indicator         PUE HXS.EX-1         PUE HXS.EX-1         PUE HXS.EX-1           Ingress protection - platform         IP 66/68         <	Verification unit [e]	-600 kg	-1500 kg	-3000 kg
III	Tare range	–60 kg	–150 kg	-300 kg
EX approval  ATEX : KDB 17ATEX0066X IECEX: IECEX DBAC 19.0001X III 20 Ex ib III TABC III 20 Ex ib III	Verification	Yes	Yes	Yes
IECEX: IECEX OBAC 19.0001X   IECEX: IECEX OBAC 19.0001X   IECEX: IECEX OBAC 19.0001X	OIML class	III	III	III
	EX approval			
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           Keyboard         membrane, 35 keys         membrane, 35 keys         membrane, 35 keys           Indicator         PUE HXS.EX-1         PUE HXS.EX-1         PUE HXS.EX-1         PUE HXS.EX-1           Ingress protection - platform         IP 68         IP 68         IP 66/68         IP 66/68           Ingress protection - indicator         IP 66/68         IP 66/68         IP 66/68         IP 66/68           Ingress protection - indicator         IP 66/68         IP 66/68         IP 66/68         IP 66/68           Ingress protection - indicator         IP 66/68         IP 66/68         IP 66/68         IP 66/68           Ingress protection - indicator         IP 66/68         IP 66/68         IP 66/68         IP 66/68           Ingress protection - indicator         IP 66/68         IP 66/68         IP 66/68         IP 66/68         IP 66/68           Ingress protection - indicator         1	EX marking			
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           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           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 ÷ +50 °C           Transport and storage temperature         60 × 1200 mm         860 × 1200 mm         860 × 1200 mm         8	Hazardous areas classification	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22	zones 1, 2, 21 and 22
Similar   Simi	Platform material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
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 66/68           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         860 × 1200 mm         860 × 1200 mm         860 × 1200 mm         329 × 231 × 120 mm           Net weight****         51 kg         51 kg         51 kg         51 kg           Gross weight*****         85 kg         85 kg         8	Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
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 66/68           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         −10 ÷ +50 °C         −10 ÷ +50 °C         −10 ÷ +50 °C           temperature         Weighing pan dimensions         860 × 1200 mm         860 × 1200 mm         860 × 1200 mm         860 × 1200 mm           Indicator dimensions         329 × 231 × 120 mm           Net weight****         51 kg         51 kg         51 kg         51 kg	Indicator fastening	3 m cable	3 m cable	3 m cable
Indicator         PUE HX5.EX-1         PUE HX5.EX-1         PUE HX5.EX-1           Ingress protection - platform         IP 68         IP 68         IP 66/68           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         -10 ÷ +50 °C         -10 ÷ +50 °C         -10 ÷ +50 °C           temperature         Weighing pan dimensions         860 × 1200 mm         860 × 1200 mm         860 × 1200 mm           Indicator dimensions         329 × 231 × 120 mm         329 × 231 × 120 mm         329 × 231 × 120 mm         51 kg           Gross weight*****         51 kg         51 kg         51 kg         85 kg	Display	5" graphic display	5" graphic display	5" graphic display
Ingress protection - platform   IP 68   IP 68   IP 66/68   IP 66	Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
P 66/68   P 66	Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
RS 232 2 2 2 2  RS 485 1 1 1 1 1  Power supply** 230V AC 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 −10 ÷ +50 °C −10 ÷ +50 °C −10 ÷ +50 °C  temperature  Weighing pan dimensions 860 × 1200 mm 860 × 1200 mm 860 × 1200 mm  Indicator dimensions 329 × 231 × 120 mm 329 × 231 × 120 mm  Net weight**** 51 kg 51 kg 51 kg  Gross weight**** 85 kg 85 kg 85 kg	Ingress protection - platform	IP 68	IP 68	IP 68
RS 485       1       1       1         Power supply**       230V AC       230V AC       230V AC         Power consumption       15 W       15 W       15 W         Operating temperature $-10 \div +40 ^{\circ}\text{C}$ $-10 \div +40 ^{\circ}\text{C}$ $-10 \div +40 ^{\circ}\text{C}$ Relative humidity *** $10 \div 85\%$ $10 \div 85\%$ $10 \div 85\%$ Transport and storage $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ temperature       Weighing pan dimensions $860 \times 1200 ^{\circ}$ mm $860 \times 1200 ^{\circ}$ mm $860 \times 1200 ^{\circ}$ mm         Indicator dimensions $329 \times 231 \times 120 ^{\circ}$ mm $329 \times 231 \times 120 ^{\circ}$ mm $329 \times 231 \times 120 ^{\circ}$ mm         Net weight**** $51 ^{\circ}$ kg $51 ^{\circ}$ kg $51 ^{\circ}$ kg         Gross weight**** $85 ^{\circ}$ kg $85 ^{\circ}$ kg	Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
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       860 × 1200 mm       860 × 1200 mm       860 × 1200 mm         Indicator dimensions       329 × 231 × 120 mm       329 × 231 × 120 mm       329 × 231 × 120 mm         Net weight****       51 kg       51 kg       51 kg         Gross weight*****       85 kg       85 kg       85 kg	RS 232	2	2	2
Power consumption $15  \text{W}$ $15  \text{W}$ $15  \text{W}$ Operating temperature $-10 \div +40 ^{\circ}\text{C}$ $-10 \div +40 ^{\circ}\text{C}$ $-10 \div +40 ^{\circ}\text{C}$ Relative humidity *** $10 \div 85\%$ $10 \div 85\%$ $10 \div 85\%$ Transport and storage temperature $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ Weighing pan dimensions $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ Indicator dimensions $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ Net weight**** $51  \text{kg}$ $51  \text{kg}$ $51  \text{kg}$ Gross weight***** $85  \text{kg}$ $85  \text{kg}$ $85  \text{kg}$	RS 485	1	1	1
Operating temperature $-10 \div +40 ^{\circ}\text{C}$ $-10 \div +40 ^{\circ}\text{C}$ $-10 \div +40 ^{\circ}\text{C}$ Relative humidity *** $10 \div 85\%$ $10 \div 85\%$ $10 \div 85\%$ Transport and storage $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ temperature       Weighing pan dimensions $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ Indicator dimensions $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ Net weight**** $51  \text{kg}$ $51  \text{kg}$ $51  \text{kg}$ Gross weight***** $85  \text{kg}$ $85  \text{kg}$ $85  \text{kg}$	Power supply**	230V AC	230V AC	230V AC
Relative humidity **** $10 \div 85\%$ $10 \div 85\%$ $10 \div 85\%$ Transport and storage temperature $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ Weighing pan dimensions $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ Indicator dimensions $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ Net weight**** $51  \text{kg}$ $51  \text{kg}$ $51  \text{kg}$ Gross weight**** $85  \text{kg}$ $85  \text{kg}$	Power consumption	15 W	15 W	15 W
Transport and storage temperature $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ $-10 \div +50 ^{\circ}\text{C}$ Weighing pan dimensions $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ $860 \times 1200  \text{mm}$ Indicator dimensions $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ $329 \times 231 \times 120  \text{mm}$ Net weight**** $51  \text{kg}$ $51  \text{kg}$ $51  \text{kg}$ Gross weight**** $85  \text{kg}$ $85  \text{kg}$ $85  \text{kg}$	Operating temperature	-10 ÷ +40 °C	−10 ÷ +40 °C	−10 ÷ +40 °C
temperature         Weighing pan dimensions       860 × 1200 mm       860 × 1200 mm       860 × 1200 mm         Indicator dimensions       329 × 231 × 120 mm       329 × 231 × 120 mm       329 × 231 × 120 mm         Net weight****       51 kg       51 kg       51 kg         Gross weight****       85 kg       85 kg       85 kg	Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Indicator dimensions       329 × 231 × 120 mm       329 × 231 × 120 mm       329 × 231 × 120 mm         Net weight****       51 kg       51 kg       51 kg         Gross weight****       85 kg       85 kg       85 kg	Transport and storage temperature	-10 ÷ +50 °C	-10 ÷ +50 °C	-10 ÷ +50 °C
Net weight****         51 kg         51 kg         51 kg           Gross weight****         85 kg         85 kg         85 kg	Weighing pan dimensions	860 × 1200 mm	860 × 1200 mm	860 × 1200 mm
Gross weight**** 85 kg 85 kg 85 kg	Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
•	Net weight****	51 kg	51 kg	51 kg
<b>Platform packaging dimensions</b> 1400 × 900 × 338 mm 1400 × 900 × 338 mm 1400 × 900 × 338 mm	Gross weight****	85 kg	85 kg	85 kg
	Platform packaging dimensions	1400 × 900 × 338 mm	1400 × 900 × 338 mm	1400 × 900 × 338 mm

<sup>\*</sup> option: dual range weighing instrument

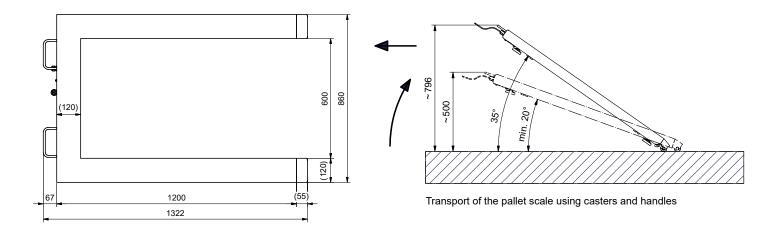
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<sup>\*\*</sup> The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)

<sup>\*\*\*</sup> non-condensing conditions

 $<sup>\</sup>hbox{\it *****} \qquad \hbox{\it mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply}$ 





# 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

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