

# PUE 7.1.HRP High Resolution Scales

Unrivalled accuracy of weighing large loads in vast range of industrial applications



PUE 7.1.HRP Max: 150 - 2000 kg



PUE 7.1.HRP Max: 16 - 32 kg



High resolution weighing module in a hermetic housing



PUE 7.1.HRP Max: 62 - 120 kg



PUE 7.1 indicator with 5.7" colour graphic display

## **Functions**



counting





Dosing



Checkweighing



Formulations



Statistics



Differential weighing



Animal weighing



Totalizing



Density determination



Peak hold





Pre-packaged goods control



Statistical quality control



Labelling



Percent weighing





Density

determination



Multilingual

Replaceable

Transactions

Alibi

units

memory

## **Features**

## The Most Precise Weighing Results in Industrial Conditions

Advanced PUE 7.1.HRP scale ensures fast and precise mass measurement in industrial conditions. The scale enables carrying out measurements with very high resolutions available so far only for laboratory balances.

## **Reliability and Safety**

Robust design and protection system against overloads and mechanical shocks allow to operate different types of loads, ensuring durability and endurance in everyday use.

## Versatility of Use

PUE 7.1.HRP scale is perfect for applications requiring high accuracy, precision and repeatability of measurement in challenging industrial environment.

#### Cooperation with PUE 7.1 Indicator

The scale can be operated via advanced PUE 7.1 indicator controlled by Windows system. The housing is made of durable ABS plastic.

## **Uncomplicated Operation and Clear Presentation of Indications**

5.7" colour screen ensures perfect readability, clear menu and intuitive information arrangement on the display guarantee uncomplicated and comfortable operation.

## **Touch-Free Operation**

Two programmable proximity sensors can be assigned with any function or application. The given function when assigned is both run and operated touch-free. This makes your work even more comfortable, and helps to keep the indicator clean.

## **Automatic Adjustment**

Internal adjustment system guarantees the highest accuracy and reliable measurements results.

## **Uncomplicated Databases Archiving**

An extensive database enables archiving work results and periodic reports, data exchange between indicators and information import and export. Images database allows to assign a graphic to each product.

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## **Technical Specifications**

Maximum canasitus (Massi	PUE 7.1.16.HRP*	PUE 7.1.32.HRP*	PUE 7.1.62.HRP	
Maximum capacity [Max]	16 kg	32 kg	62 kg	
Preload	4 kg	4 kg	30 kg	
Minimum capacity	5 g	5 g	25 g	
Readability [d]	0.1 g	0.1 g	0.5 g	
Verification unit [e]	_	_	_	
Tare range	–16 kg	–32 kg	-62 kg	
Repeatability **	0.1 g	0.1 g	0.3 g	
Linearity	±0.1 g	±0.3 g	±1 g	
Stabilization time ***	3 s	3 s	3 s	
Adjustment	internal	internal	internal	
Verification	_	_	_	
OIML class	_	_		
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel	
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel	
Indicator type	PUE 7.1	PUE 7.1	PUE 7.1	
Display	5." touch panel	5." touch panel	5." touch panel	
Keyboard	8 keys	8 keys	8 keys	
Ingress protection - platform	IP 66/67	IP 66/67	IP 66/67	
Ingress protection - indicator	IP 43	IP 43	IP 43	
USB-A	2	2	2	
RS 232	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit	
IN/OUT	$4 \times IN$ , $4 \times OUT$ for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	$4 \times IN$ , $4 \times OUT$ for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	$4 \times IN$ , $4 \times OUT$ for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	
Wireless Connection	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n	
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	
Power consumption	21 W	21 W	21 W	
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C	
Relative humidity ****	40 ÷ 80%	40 ÷ 80%	40 ÷ 80%	
Transport and storage temperature	−10 ÷ +50 °C	-10 ÷ +50 °C		
Weighing pan dimensions	360 × 280 mm	360 × 280 mm	500 × 500 mm	
Indicator dimensions	206 × 140 × 71 mm	206 × 140 × 71 mm	206 × 140 × 71 mm	
Net weight	24.7 kg	24.7 kg	37 kg	
Gross weight	28.7 kg	28.7 kg	52 kg	
Platform packaging dimensions	550 × 463 × 350 mm	550 × 463 × 350 mm	700 × 700 × 295 mm	
Indicator packaging dimensions	$300 \times 250 \times 130 \text{ mm}$	300 × 250 × 130 mm	300 × 250 × 130 mm	

<sup>\*</sup> MonoBLOCK™ measuring system

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<sup>\*\*</sup> repeatability is expressed as a standard deviation from 10 weighing cycles

<sup>\*\*\*</sup> under optimum ambient conditions

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

	PUE 7.1.120.HRP	PUE 7.1.150.HRP	PUE 7.1.300.HRP	
Maximum capacity [Max]	120 kg	150 kg	300 kg	
Preload	10 kg	30 kg	30 kg	
Minimum capacity	50 g	50 g	100 g	
Readability [d]	1 g	1 g	2 g	
Verification unit [e]	_	_	_	
Tare range	–120 kg	–150 kg	–300 kg	
Repeatability *	0.6 g	1.5 g	3 g	
Linearity	±1 g	±3 g	±6 g	
Stabilization time **	3 s	3 s	3 s	
Adjustment	internal	internal	internal	
Verification	_	_	_	
OIML class	_	_	_	
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel	
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel	
Indicator type	PUE 7.1	PUE 7.1	PUE 7.1	
Display	5." touch panel	5." touch panel	5." touch panel	
Keyboard	8 keys	8 keys	8 keys	
Ingress protection - platform	IP 66/67	IP 66/67	IP 66/67	
Ingress protection - indicator	IP 43	IP 43	IP 43	
USB-A	2	2	2	
RS 232	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit	
IN/OUT	$4 \times IN$ , $4 \times OUT$ for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	$4 \times IN$ , $4 \times OUT$ for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	$4 \times$ IN, $4 \times$ OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	
Wireless Connection	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n	
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	
Power consumption	21 W	21 W	21 W	
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C	
Relative humidity ***	40 ÷ 80%	40 ÷ 80%	40 ÷ 80%	
Transport and storage temperature	−10 ÷ +50 °C	-10 ÷ +50 °C	-10 ÷ +50 °C	
Weighing pan dimensions	$500 \times 500 \text{ mm}$	$800 \times 600 \text{ mm}$	$800 \times 600 \text{ mm}$	
Indicator dimensions	357 × 275 × 120 mm	357 × 275 × 120 mm	357 × 275 × 120 mm	
Net weight	37 kg	71.5 kg	71.5 kg	
Gross weight	52 kg	119 kg	119 kg	
Platform packaging dimensions	700 × 700 × 295 mm	1000 × 800 × 307 mm	mm 1000 × 800 × 307 mm	
Indicator packaging dimensions	300 × 250 × 130 mm	300 × 250 × 130 mm	300 × 250 × 130 mm	

repeatability is expressed as a standard deviation from 10 weighing cycles under optimum ambient conditions non-condensing conditions

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<sup>\*\*\*</sup> 

	PUE 7.1.300.1.HRP	PUE 7.1.600.HRP	PUE 7.1.1100.HRP	
Maximum capacity [Max]	300 kg	600 kg	1100 kg	
Preload	30 kg	60 kg	100 kg	
Minimum capacity	100 g	250 g	100 g	
Readability [d]	2 g	5 g	10 g	
Verification unit [e]	_	_	_	
Tare range	–300 kg	-600 kg	–1100 kg	
Repeatability *	3 g	7.5 g	15 g	
Linearity	±6 g	±15 g	±30g	
Stabilization time **	3 s	3 s	3 s	
Adjustment	internal	internal	internal	
Verification	_	_	_	
OIML class	_	_	_	
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel	
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel	
Indicator type	PUE 7.1	PUE 7.1	PUE 7.1	
Display	5." touch panel	5." touch panel	5." touch panel	
Keyboard	8 keys	8 keys	8 keys	
Ingress protection - platform	IP 66/67	IP 66/67	IP 66/67	
Ingress protection - indicator	IP 43	IP 43	IP 43	
USB-A	2	2	2	
RS 232	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	$1 \times 8$ -pin socket, $1 \times 15$ -pin socket	
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit	
IN/OUT	$4 \times IN$ , $4 \times OUT$ for (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	$4 \times IN$ , $4 \times OUT$ 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)	
Wireless Connection	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n	
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	
Power consumption	21 W	21 W	21 W	
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 ℃	
Relative humidity ***	40 ÷ 80%	40 ÷ 80%	40 ÷ 80%	
Transport and storage temperature	-10 ÷ +50 °C	-10 ÷ +50 °C	-10 ÷ +50 °C	
Weighing pan dimensions	1000 × 800 mm	1000 × 800 mm	1000 × 800 mm	
Indicator dimensions	357 × 275 × 120 mm	357 × 275 × 120 mm	357 × 275 × 120 mm	
Net weight	126 kg	126 kg	126 kg	
Gross weight	160 kg	160 kg	160 kg	
Platform packaging dimensions	1200 × 1000 × 328 mm	1200 × 1000 × 328 mm	1200 × 1000 × 328 mm	
Indicator packaging dimensions	300 × 250 × 130 mm	300 × 250 × 130 mm	$300 \times 250 \times 130 \text{ mm}$	

repeatability is expressed as a standard deviation from 10 weighing cycles under optimum ambient conditions non-condensing conditions

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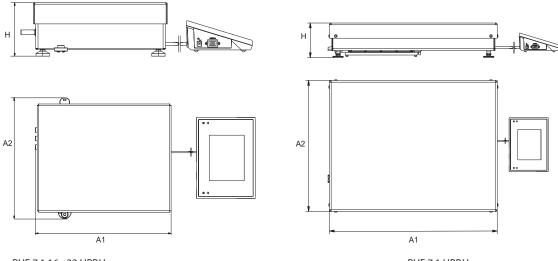
<sup>\*\*\*</sup> 

	PUE 7.1.2000.HRP	
Maximum capacity [Max]	2000 kg	
Preload	200 kg	
Minimum capacity	200 g	
Readability [d]	20 g	
Verification unit [e]	_	
Tare range	-2000 kg	
Repeatability *	30 g	
Linearity	±60g	
Stabilization time **	3 s	
Adjustment	internal	
Verification	_	
OIML class	_	
Platform material	St3S powder-coated steel	
Weighing pan material	AISI304 stainless steel	
Indicator type	PUE 7.1	
Display	5." touch panel	
Keyboard	8 keys	
Ingress protection - platform	IP 66/67	
Ingress protection - indicator	IP 43	
USB-A	2	
RS 232	1 × gniazdo 8-pin, 1 × gniazdo 15-pin	
Ethernet	10 / 100 Mbit	
IN/OUT	$4 \times$ IN, $4 \times$ OUT dla (IN – 5-24 VDC, OUT – max 30 VDC, 0,5 ADC)	
Wireless Connection	802.11 b/g/n	
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz	
Power consumption	21 W	
Operating temperature	+10 ÷ +40 °C	
Relative humidity ***	40 ÷ 80%	
Transport and storage temperature	-10 ÷ +50 °C	
Weighing pan dimensions	1250 × 1000 mm	
Indicator dimensions	357 × 275 × 120 mm	
Net weight	300 kg	
Gross weight	425 kg	
Platform packaging dimensions	1500 × 1250 × 615 mm	
Indicator packaging dimensions	300 × 250 × 130 mm	

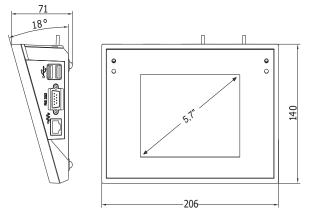
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## **Dimensions**



PUE 7.1.16 - 32.HRP.H



PUE 7.1.HRP.H

Scale type	A1	A2	Н
PUE7.1.62 -120.HRP	500	500	150±3
PUE7.1.150 - 300.HRP	800	600	175±3
PUE7.1.300.1 -1100.HRP	1000	800	175±3
PUE7.1.2000.HRP	1250	1000	175±3
PUE7.1.16 -32.HRP	360	280	139±3

dimensions in mm

PUE 7.1

## Accessories

## **Peripheral Devices**

- · Epson dot matrix printer
- · label printers Zebra
- WWG-2/5 large-size display
- LCD WD-4/4 display (backlit)
- stack light
- keyboards, external switches
- transponder card scanner
- barcode scanner

## Cables, Converters

- RS-232 P0108 cable (scale indicator)
- RS-232 P0167 cable (scale indicator)
- RS-232 PT0301 cable (scale indicator)
- RS-232 P0151 Epson printer cable

- RS-232 P0183 Zebra printer cablei
- IN/OUT PT0128 cables
- USB cable type A-B
- Ethernet cable
- AP2-1 current loop unit (in stainless steel housing)
- K0047 cigarette lighter cable

## **Weighing Platforms**

- 1 load cell platforms
- 4 load cell platforms
- high resolution platforms

## Remaining accessories

- weighing tables
- stands for indicators

## **Dedicated Software**

## R-LAB

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

#### **Label Editor R02**

- designing label templates
- sending graphics and fonts to label printers
- printing label templates using connected printers

## E2R PGC

- synchronization of databases, operators, products schedules
- record of measurements and PGC controls carried out on weighing instruments linked in ETHERNET network
- quality assessment of pre- packaged goods based on acquired data

## **E2R Weighing Records**

- complete, automated databases synchronization
- fully supported processes of labelling and parts counting
- record of weighings, weighings archiving
- basic and advanced (with graphs) reports

## E2R Formulations

- carrying out simple formulations
- support of an advanced formulations orders function
- · warehouse management
- optional automatic dispensing and constant correction of the dispensing process
- · control of an ingredient using the barcode scanner

#### **E2R Weighings**

- record of measurements carried out using the weighing indicators
- online monitoring of the production lines
- weighing thresholds control
- employees working time reporting

## **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

## 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

#### LabView Driver

• operation of RADWAG balances in LabView environment

## **RADWAG Remote Desktop**

- remote operation via computer, mobile phone or tablet
- sending text messages
- version for Windows 10 and Android systems

## **Parameters Editor**

- remote change of parameters
- remote on-line preview of the display
- displaying current mass indication
- software update
- file loading, editing and saving parameters to a file
- import and export of parameters
- interfaces: RS232, Ethernet and Wireless Connection.
- quick and easy edition of balance parameters using computer.

## **Audit Trail Reader**

- support of Audit Trail function available for 3Y, 4Y, HY10, WLY, WPY series weighing instruments
- record of operator's activity from the moment of logging in

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