

# PS R2.M Precision Balances

'Standard level' measurement under laboratory and slightly challenging industrial conditions





Radwag MonoBLOCK™, an innovative weighing system



Single-point support for weighing pan

PS R2.M, d = 0.01 g

## **Functions**



Parts



Dosing



Checkweighing



Percent weighing



Statistics



Animal weighing



Autotest



Density determination



Under hook weighing



Peak hold

GLP

procedures

measurement

Ambient conditions



Alibi memory



Replaceable unit



Multilingual menu

## **Features**

## RADWAG MonoBLOCK™, an Innovative Weighing System

The most advanced weighing system technology allowing measurement with the readability of d=0.01 g at 10 kg maximum capacity. The mechanism quarantees stable repeatability over the whole product life cycle, it also ensures high resistance to ambient conditions change.

## **Ease of Use and Measurements Accuracy**

Combination of weighing accuracy, high performance and robust design enables applying PS R2.M balances in most of the laboratory and industrial solutions and minimizes eccentricity error. The labyrinth-shape fastening guarantees excellent resistance to contamination.

## Perfect Readability and Clear Information Layout

Large, easy-to-read LCD display offers not only a clear presentation of the weighing result, but also enables displaying messages related to the drying process as well as pictograms of active functions and working modes. Quick access keys located on the operation panel allow to run a given function with just one click.

## **Data Management**

PS R2.M information system is based on databases of operators, products, weighings and tares. All saved data can be analysed. exported, imported or exchanged between weighing instruments.

#### **ALIBI Memory**

Internal ALIBI memory guarantees safety and automatic record of measurement copies, it also offers possibility to preview, copy and archive data.

#### Internal Adjustment Within the Whole Weighing Range

The internal adjustment system guarantees precision and high measurement repeatability. Leverage of an internal weight mass enables adjustment within the whole weighing range.

#### **New Construction of Weighing Pan Fastening**

The innovative construction of PS X2.M balance features a new single-point weighing pan fastening, which ensures its excellent geometry.

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## **Technical Specifications**

	PS 4500.R2.M	PS 6100.R2.M	PS 8100.R2.M	PS 10100.R2.M
Maximum capacity [Max]	4500 g	6100 g	8100 g	10100 g
Minimum load	0.5 g	0.5 g	0.5 g	0.5 g
Readability [d]	0.01 g	0.01 g	0.01 g	0.01 g
Verification scale interval [e]	0.1 g	0.1 g	0.1 g	_
Tare range	-4500 g	-6100 g	-8100 g	–10100 g
Repeatability (5% Max)*	0.005 g	0.005 g	0.005 g	0.005 g
Repeatability (Max)	0.008 g	0.008 g	0.01 g	0.012 g
Linearity	±0.03 g	±0.03 g	±0.03 g	±0.03 g
Sensitivity temperature drift**	$2 \times 10-6 / ^{\circ}C \times Rt$	$2 \times 10^{-6}$ /°C × Rt	$2 \times 10$ -6 / °C × Rt	2 × 10-6 / °C × Rt
Minimum weight (U=1%, k=2)	1 g	1 g	1 g	1 g
Minimum weight (USP)	10 g	10 g	10 g	10 g
Stabilization time	1.5 s	1.5 s	1.5 s	1.5 s
Adjustment	internal	internal	internal	internal
Verification	Yes	Yes	Yes	_
OIML Class	II	II	II	_
Display	LCD (with backlight)	LCD (with backlight)	LCD (with backlight)	LCD (with backlight)
Keypad	14 keys	14 keys	14 keys	14 keys
Protection class	IP 43	IP 43	IP 43	IP 43
Databases	5	5	5	5
USB-A	1	1	1	1
USB-B	1	1	1	1
RS 232	2	2	2	2
Wireless connection (option)***	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
Power supply	12 ÷ 16 V DC	12 ÷ 16 V DC	12 ÷ 16 V DC	12 ÷ 16 V DC
Power consumption	4 W	4 W	4 W	4 W
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Atmospheric humidity****	40 ÷ 80 %	40 ÷ 80 %	40 ÷ 80 %	40 ÷ 80 %
Transport and storage temperature	−20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C	−20 ÷ +50 °C
Weighing pan dimensions	195 × 195 mm	195 × 195 mm	195 × 195 mm	195 × 195 mm
Weighing device dimensions	333 × 206 × 107 mm	333 × 206 × 107 mm	333 × 206 × 107 mm	333 × 206 × 107 mm
Net weight	4.5 kg	4.5 kg	4.5 kg	4.5 kg
Gross weight	6.1 kg	6.1 kg	6.1 kg	6.1 kg
Packaging dimensions	470 × 380 × 336 mm	470 × 380 × 336 mm	470 × 380 × 336 mm	470 × 380 × 336 mm

Rt \*

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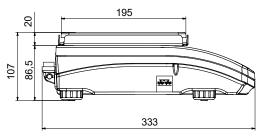
net weight repeatability is expressed as a standard deviation from 10 weighing cycles parameter determined in the following temperature range: +15  $\div$  +35  $^{\circ}\text{C}$ 

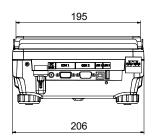
optional solution on purchase order

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

In accordance with type approval, the balance parameters are maintained in temperature range:  $+15 \div +35$  °C.

#### **Dimensions**





PS R2.M, d = 0.01 g

## Accessories

#### **Weighing Tables**

- granite antivibration table
- antivibration tables for laboratory balances
- professional weighing table

## **Professional Weighing**

- KIT 195 density determination kit
- under-hook weighing rack

#### **Peripheral Devices**

- · label printer
- receipt printer
- Epson dot matrix printer
- barcode scanners
- · WD-6 LCD display

#### Cables, Converters

- P0108: RS 232 cable (balance-computer)
- P0151: RS 232 cable (balance Epson printer)
- USB cable type A-B
- AP2-1 power loop output

#### **Electrical Accessories**

• power supply with ZR-02 battery

#### **Remaining Accessories**

- suitcase for PS
- A2 Protective Cover for balance PS R2.M

## **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
- basic and advanced (with graphs) reports

#### 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

## LabView Driver

• operation of RADWAG balances in LabView environment

## **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

#### Alibi Reader

- readout of data saved to Alibi memory
- export of data saved to Alibi memory
- · data filtering and reports generating
- saving ALIBI database to CSV file

#### R Pane

- operator access to all keys and functions that are to be found on an operation panel
- communication via COM1, COM2 or USB,
- compatible with: Windows Vista, 7, 8, 8.1, 10, Server 2008R2, 2012, 2016.