

# PS 3Y.M Precision Balances

Professional weighing under laboratory and slightly challenging industrial conditions



PS 3Y.M, d = 0.01 g



Radwag MonoBLOCK™, an innovative weighing system



Draft shield improving weighing

## **Functions**



counting











Percent weighing



Statistics



Animal weighing



Differential weighing



Statistical quality control



Autotest



Density determination



Under hook weighing



GLP procedures



Proximity sensors



Ambient conditions measurement



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 guarantees stable repeatability over the whole product life cycle, it also ensures high resistance to ambient conditions change.

## Reliable Results and High Measurement Precision

Excellent measurement parameters and performance enable applying PS 3Y.M balances in laboratory and industry.

## 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.

#### **Automatic Control of the Level**

Levelling system facilitates adjustment of device level, it also uninterruptedly controls the level state, and informs about potential level deviations.

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

The innovative construction of PS 3Y.M balance features a new singlepoint weighing pan fastening, which ensures its excellent geometry and minimizes eccentricity error. The labyrinth-shape fastening guarantees great resistance to contamination.

#### **Reliable Results and High Measurement Precision**

Excellent measurement parameters and performance enable applying PS 3Y.M balances in laboratories and various branches of industry.

## **Intuitive Operation and Touch Screen**

5.7" colour touch screen enables intuitive operation and easy access to numerous applications and functions of the weighing instrument.

## **Numerous Options of Data Management**

The instrument enables saving all data of carried out measurements as reports and graphs.

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## **Technical Specifications**

	PS 4500.3Y.M	PS 6100.3Y.M	PS 8100.3Y.M	PS 10100.3Y.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]	_	_	_	_
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**	$2 \times 10^{-6}$ /°C × Rt	$2 \times 10^{-6}$ / °C × Rt	$2 \times 10^{-6}$ / °C × Rt	$2 \times 10^{-6}$ /°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	_	_	_	_
OIML Class	_	_	_	_
Indicator fastening	35 cm cable, wireless connection (option)***			
Display	5.7" colour, resistive touch screen			
Keypad	8 keys	8 keys	8 keys	8 keys
Protection class	IP 43	IP 43	IP 43	IP 43
Databases	19	19	19	19
Touch-free operation	2 programmable proximity sensors			
USB-A	2	2	2	2
Ethernet	10 / 100 Mbit			
RS 232	2	2	2	2
Wireless Connection	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
IN/OUT	$4 \times IN$ , $4 \times OUT$	$4 \times IN, 4 \times OUT$	$4 \times IN, 4 \times OUT$	$4 \times IN$ , $4 \times OUT$
Power supply	13.5 ÷ 16 V			
Power consumption	10 W	10 W	10 W	10 W
Operating temperature	+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			
Weighing device dimensions	425 × 251 × 99 mm	425 × 251 × 101 mm	425 × 251 × 101 mm	425 × 251 × 101 mm
Net weight	5.6 kg	6.8 kg	6.8 kg	6.8 kg
Gross weight	8.2 kg	9.4kg	9.4kg	9.4kg
Packaging dimensions	720 × 360 × 260 mm	716 × 360 × 260 mm	716 × 360 × 260 mm	716 × 360 × 260 mm

Rt net weigh

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

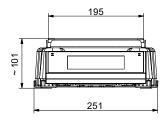
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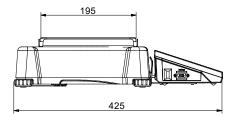
repeatability is expressed as a standard deviation from 10 weighing cycles

<sup>\*\*</sup> parameter determined in the following temperature range:  $+15 \div +35$  °C

<sup>\*\*\*</sup> optional solution on purchase order

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





PS 3Y.M

## 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

#### **Ambient Conditions**

• THB-S / THB-P ambient conditions module

#### Cables, Converters

- P0108: RS 232 cable (balance-computer)
- P0167: RS 232 cable (balance-computer)
- P0151: RS 232 cable (balance Epson printer)

#### **Peripheral Devices**

- Epson dot matrix printer
- label printer
- receipt printer
- barcode scanners
- PA-04/H Automatic Feeder
- WD-6 LCD display

#### **Electrical Accessories**

• ZR-02 power supply with battery

#### **Remaining Accessories**

suitcase for PS

#### **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

#### 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

## Label Editor R02

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

#### **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

#### **Parameters Editor**

- $\bullet\ \text{remote change of parameters}$
- 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

## 3Y Database Editor

- databases readout
- databases editing
- databases saving from a computer software to connected weighing instrument
- connection with 3Y balances via Ethernet and RS232

## **RADWAG Remote Desktop**

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

#### LabView Driver

• operation of RADWAG balances in LabView environment

#### **RAD KEY**

 establishing cooperation between a weighing instrument and a computer

#### **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