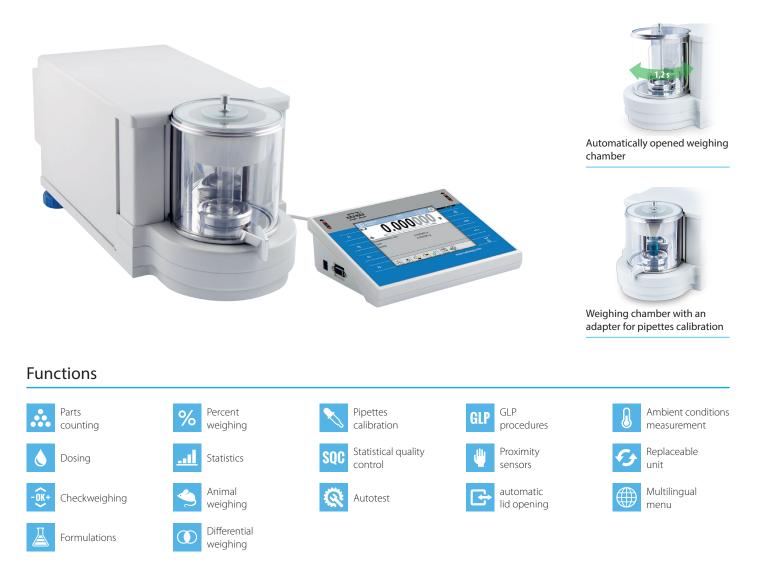


# MYA 4Y.P Microbalances

The most precise and comfortable calibration and volume control of the piston pipettes



# Features

# Pipettes Volume Control Compliant with ISO 8655

Special adapter located in the weighing chamber enables verifying the volume of piston pipettes with use of gravimetric method. Evaporation ring limits liquid vaporization which significantly improves measurement accuracy.

#### 2 in 1 Functionality

The MYA 4Y.P microbalances have been designed to allow pipettes calibration, however they offer full functionality typical for devices that are used to carry out standard mass measurement processes.

#### **Significantly Fast Measurement**

Powerful processor offers new possibilities of operation assuring both short indication stabilization time and repeatability.

#### 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.

#### **Automatic Level Control**

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

## **Automatic Weighing Chamber**

The system controlling weighing chamber opening enables quick access to the weighing pan. Proximity sensors allow you to open and close the weighing chamber touch-free.

#### **Numerous Options of Data Management**

Extensive storage capacity enables record of all measurement data in a form of complex reports and statistical graphs.

#### **ALIBI Memory**

Data security and protection is provided by ALIBI memory which automatically archives all carried out measurements.

# **Technical Specifications**

	MYA 21.4Y.P
Maximum capacity [Max]	21 g
Minimum load	100 µg
Readability [d]	1 µg
Verification scale interval [e]	1 mg
Tare range	-21 g
Repeatability*	1.2 μg (Rt ≤ 1 g) 2 μg (1 g < Rt ≤ 5 g) 2.5 μg (5 g < Rt ≤ 11 g) 3 μg (11 g < Rt ≤ 21 g)
Linearity	±7 µg
Eccentric load deviation	7 μg
Sensitivity temperature drift**	$1 \times 10^{-6} / ^{\circ}C \times Rt$
Sensitivity time drift	$1 \times 10^{-6}$ / Year $\times$ Rt
Minimum weight (U=1%, k=2)	0.24 mg
Minimum weight (USP)	2.4 mg
Stabilization time	max 10 s
Adjustment	internal
Verification	Yes
OIML Class	1
Indicator fastening	35 cm cable, wireless connection (option)***
Display	5.7" colour, resistive touch screen
Keypad	8 keys
Protection class	IP 43
Databases	19
Touch-free operation	2 programmable proximity sensors
USB-A	2
RS 232	2
Wireless connection	802.11 b/g/n
Ethernet	10 / 100 Mbit
IN/OUT	$4 \times IN, 4 \times OUT$
Power supply	13.5 ÷ 16 V DC
Power consumption	10 W
Operating temperature	+10 ÷ +40 °C
Atmospheric humidity****	40 ÷ 80%
Transport and storage temperature	−10 ÷ +50 °C
Weighing pan dimensions	ø 26 mm
Weighing chamber dimensions	ø 90 × 90 mm
Weighing device dimensions	411 × 163 × 183 mm
Net weight	9.1 kg
Gross weight	16.6 kg
Packaging dimensions	660 × 660 × 455 mm

Rt net weight

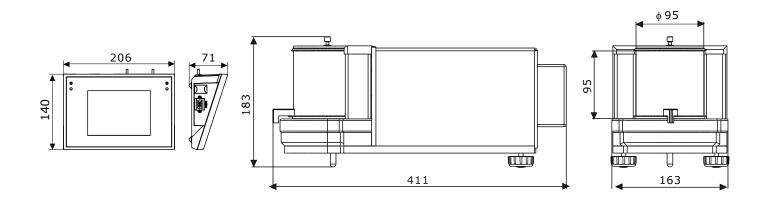
\* repeatability is expressed as a standard deviation from 10 weighing cycles

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

\*\*\* optional solution on purchase order

\*\*\*\* non-condensing conditions

Values of parameters provided in Technical Specifications table have been determined under stable laboratory conditions. Due to ambient conditions impact or/and balance setup, the above parameters may vary for environments other than laboratory.



# Accessories

# Weighing Tables

- granite antivibration table
- antivibration tables for laboratory balances
- professional weighing table
- workstation for pipettes calibration

# **Professional Weighing**

MYA adapter for pipettes calibration

# **Ambient Conditions**

- DJ-05 anti-static ionizer
- THB-S or THB-P sensor

# Peripheral Devices

- EPSON dot matrix printer
- barcode scanners
- WD-5/3Y LCD display
- ambient conditions modules

# **Cables, Converters**

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

#### **Electrical accessories**

• ZR-02 power supply with battery

# 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

# Label Editor R02

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

# Pipettes

- determining measurement errors of pipettes volume
- accordance with ISO 8655
- calibration of single-channel and multi-channel pipettes
- calibration of fixed-volume and variable-volume pipettes

# 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

- 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.

# 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

# RADWAG Remote Desktop

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