

# UYA 4Y.F Ultra-Microbalances

## MYA 4Y.F Microbalances



Excellent precision and accuracy of determining filters absorption capabilities during differential mass measurement



UYA 4Y.F



MYA 4Y.F1



MYA 4Y.F1



Filters mass measurement

## Functions

- Percent weighing
- Statistics
- Differential weighing
- Filters weighing
- Autotest
- GLP procedures
- Proximity sensors
- Ambient conditions measurement
- Air buoyancy correction
- Multilingual menu
- Replaceable unit

## Features

### Stainless steel detachable weighing chamber

MYA 4Y.F microbalance features a stainless steel chamber for filter weighing. Innovative disassembly system facilitates chamber cleaning. Its lid is partly made of glass therefore the operator can observe the filter and make sure that it remains in the same position after chamber closing. The chamber is a highly hermetic solution, and the large weighing pan intended for filters allows precise measurement of filters of various sizes.

### The Most Precise Control Over Filters Absorption Capabilities

Professional highly hermetic weighing chamber and an open-work weighing pan of the MYA 4Y.F microbalance both enable accurate measurements of filters of various types and dimensions.

### Significantly Fast Measurement

Powerful processor offers new possibilities of operation assuring 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.

### 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.

### 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

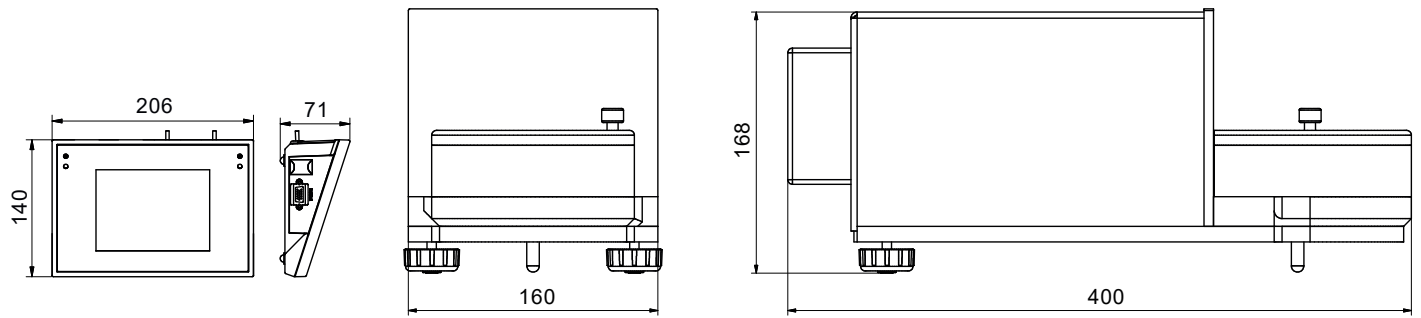
	UYA 2.4Y.F	MYA 5.4Y.F	MYA 5.4Y.F1
<b>Maximum capacity [Max]</b>	2.1 g	5.1 g	5.1 g
<b>Minimum load</b>	10 µg	100 µg	100 µg
<b>Readability [d]</b>	0.1 µg	1 µg	1 µg
<b>Verification scale interval [e]</b>	1 mg	1 mg	1 mg
<b>Tare range</b>	-2.1 g	-5.1 g	-5.1 g
<b>Standard values</b>			
<b>Repeatability(5% Max)*</b>	0,15 µg	0,6 µg	0,6 µg
<b>Repeatability(Max)*</b>	0,35 µg	1,6 µg	1,6 µg
<b>Minimum weight (USP)</b>	0,3 mg	1,2 mg	1,2 mg
<b>Minimum weight (U=1%, k=2)</b>	0,03 mg	0,12 mg	0,12 mg
<b>Permissible values</b>			
<b>Repeatability(5% Max)*</b>	0,35 µg	1,2 µg	1,2 µg
<b>Repeatability(Max)*</b>	0,6 µg	2,4 µg	2,4 µg
<b>Linearity</b>	±1.5 µg	±5 µg	±5 µg
<b>Eccentric load deviation</b>	1.5 µg	5 µg	5 µg
<b>Stabilization time</b>	10 ÷ 20 s	max 8 s	max 8 s
<b>Adjustment</b>	internal	internal	internal
<b>Verification</b>	Yes	Yes	Yes
<b>OIML Class</b>	I	I	I
<b>Indicator fastening</b>	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***
<b>Display</b>	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen
<b>Keypad</b>	8 keys	8 keys	8 keys
<b>Protection class</b>	IP 43	IP 43	IP 43
<b>Databases</b>	19	19	19
<b>Touch-free operation</b>	2 programmable proximity sensors	2 programmable proximity sensors	2 programmable proximity sensors
<b>USB-A</b>	2	2	2
<b>Ethernet</b>	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit
<b>RS 232</b>	2	2	2
<b>Wireless connection</b>	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
<b>Power supply</b>	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC
<b>Power consumption</b>	10 W	10 W	10 W
<b>Operating temperature</b>	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
<b>Operating temperature change rate</b>	±0.3°C/1h (±1°C/8h)	±0.3°C/1h (±1°C/8h)	±0.3°C/1h (±1°C/8h)
<b>Atmospheric humidity****</b>	40 ÷ 80%	40 ÷ 80%	40 ÷ 80%
<b>Relative humidity change rate</b>	±1%/h (±4%/8h)	±1%/h (±4%/8h)	±1%/h (±4%/8h)
<b>Transport and storage temperature</b>	-10 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C
<b>Weighing pan dimensions</b>	ø 50 mm	ø 100 mm (for filters), ø 26 mm	ø 160 mm (for filters), ø 26 mm
<b>Weighing chamber dimensions</b>	ø 118 × 35 mm	ø 118 × 35 mm	ø 168 × 35 mm
<b>Weighing device dimensions</b>	400 × 160 × 168 mm	400 × 160 × 168 mm	450 × 180 × 168 mm
<b>Net weight</b>	9.1 kg	9.1 kg	9.1 kg
<b>Gross weight</b>	16.6 kg	16.6 kg	16.6 kg
<b>Packaging dimensions</b>	660 × 660 × 455 mm	660 × 660 × 455 mm	660 × 660 × 455 mm

\* repeatability is expressed as a standard deviation from 10 weighing cycles \*\* parameter determined in the following temperature range: +15 ÷ +35 °C

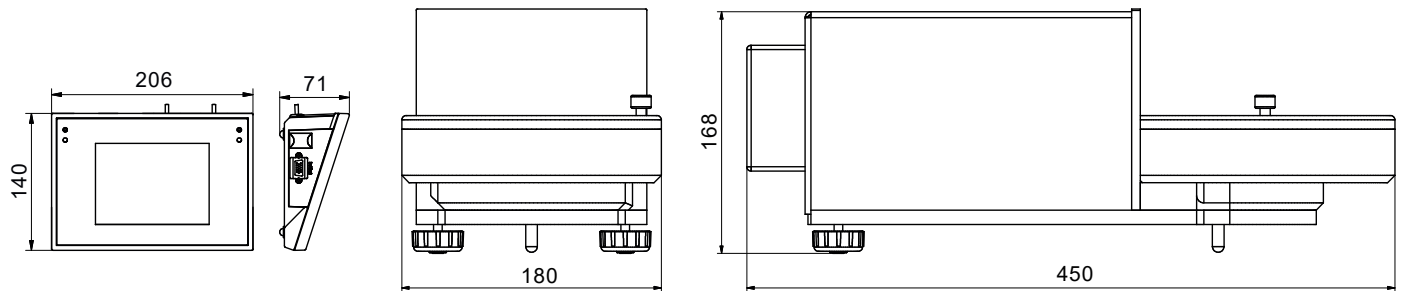
\*\*\* optional solution on purchase order \*\*\*\* non-condensing conditions

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.

## Dimensions



F version



F1 version

## Accessories

### Weighing Tables

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

### 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

### 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

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### 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