

UYA 4Y Ultra-Microbalances

MYA 4Y Microbalances



Unrivalled precision and comfortable measurements of small masses carried out with the highest accuracy



UYA 4Y



MYA 4Y



Automatically opened weighing chamber



Proximity sensors

Functions

- | | | | | |
|----------------|-----------------------|-----------------------------|--------------------------------|-------------------|
| Parts counting | Percent weighing | Statistical quality control | Proximity sensors | Multilingual menu |
| Dosing | Statistics | Autotest | Ambient conditions measurement | Replaceable unit |
| Checkweighing | Animal weighing | Automatic sliding door | GLP procedures | Moveable range |
| Formulations | Differential weighing | | | |

Features

Excellent Readability Starting from 0.1 µg

Due to exceptional weighing parameters, the UYA 4Y and MYA 4Y microbalances are intended for the most demanding laboratory applications.

Significantly Fast Measurement

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

Unequaled Repeatability and Compliance with USP

4Y microbalances feature the highest measurements accuracy, excellent repeatability and are compliant with USP requirements (Chapter 41 and 1251).

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

	UYA 2.4Y	UYA 6.4Y
Maximum capacity [Max]	2.1 g	6.1 g
Minimum load	10 µg	10 µg
Readability [d]	0.1 µg	0.1 µg
Verification scale interval [e]	1 mg	1 mg
Tare range	-2.1 g	-6.1 g
Repeatability*	0.25 µg (Rt ≤ 0.2 g) 0.4 µg (0.2 g < Rt ≤ 2g)	0.25 µg (Rt ≤ 0.3 g) 0.4 µg (0.3 g < Rt ≤ 6.1 g)
Linearity	±1.5 µg	±1.5 µg
Eccentric load deviation	1.5 µg	1.5 µg
Sensitivity temperature drift**	1 × 10 ⁻⁶ / °C	1 × 10 ⁻⁶ / °C × Rt
Sensitivity time drift	1 × 10 ⁻⁶ / Year × Rt	1 × 10 ⁻⁶ / Year × Rt
Minimum weight (U=1%, k=2)	0.05 mg	0.05 mg
Minimum weight (USP)	0.5 mg	0.5 mg
Stabilization time	10 ÷ 20 s	10 ÷ 20 s
Adjustment	internal	internal
Verification	Yes	Yes
OIML Class	I	I
Indicator fastening	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***
Display	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen
Keypad	8 keys	8 keys
Protection class	IP 43	IP 43
Databases	19	19
Touch-free operation	2 programmable proximity sensors	2 programmable proximity sensors
USB-A	2	2
Ethernet	10 / 100 Mbit	10 / 100 Mbit
RS 232	2	2
Wireless connection	802.11 b/g/n	802.11 b/g/n
IN/OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT
Power supply	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC
Power consumption	10 W	10 W
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C
Atmospheric humidity****	40 ÷ 80%	40 ÷ 80%
Transport and storage temperature	-10 ÷ +50 °C	-10 ÷ +50 °C
Weighing pan dimensions	ø 16 mm	ø 16 mm
Weighing chamber dimensions	ø 90 × 90 mm	ø 90 × 90 mm
Weighing device dimensions	411 × 163 × 183 mm	411 × 163 × 183 mm
Net weight	9.1 kg	9.1 kg
Gross weight	16.6 kg	16.6 kg
Packaging dimensions	660 × 660 × 455 mm	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 ÷ +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.

	MYA 0.8/3.4Y	MYA 2.4Y	MYA 5.4Y
Maximum capacity [Max]	0.8 g / 3 g	2.1 g	5.1 g
Minimum load	50 µg / 500 µg	50 µg	50 µg
Readability [d]	1 µg / 10 µg	1 µg	1 µg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-3 g	-2.1 g	-5.1 g
Repeatability*	1 µg (Rt ≤ 0.8 g) 4.1 µg (0.8g < Rt ≤ 3 g)	0.5 µg (Rt ≤ 0.2 g) 1 µg (0.2g < Rt ≤ 2 g)	1 µg (Rt ≤ 1 g) 1.6 µg (1g < Rt ≤ 5.1 g)
Linearity	±3 µg / ±10 µg	±3 µg	±5 µg
Eccentric load deviation	3 µg / 10 µg	3 µg	5 µg
Sensitivity temperature drift**	1 × 10 ⁻⁶ / °C × Rt	1 × 10 ⁻⁶ / °C × Rt	1 × 10 ⁻⁶ / °C × Rt
Sensitivity time drift	1 × 10 ⁻⁶ / Year × Rt	1 × 10 ⁻⁶ / Year × Rt	1 × 10 ⁻⁶ / Year × Rt
Minimum weight (U=1%, k=2)	0.2 mg	0.1 mg	0.2 mg
Minimum weight (USP)	2 mg	1 mg	2 mg
Stabilization time	max 8 s	max 8 s	max 8 s
Adjustment	internal	internal	internal
Verification	Yes	Yes	Yes
OIML Class	I	I	I
Indicator fastening	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***
Display	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen
Keypad	8 keys	8 keys	8 keys
Protection class	IP 43	IP 43	IP 43
Databases	19	19	19
Touch-free operation	2 programmable proximity sensors	2 programmable proximity sensors	2 programmable proximity sensors
USB-A	2	2	2
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit
RS 232	2	2	2
Wireless connection	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
IN/OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT
Power supply	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC
Power consumption	10 W	10 W	10 W
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Atmospheric humidity****	40 ÷ 80%	40 ÷ 80%	40 ÷ 80%
Transport and storage temperature	-10 ÷ +50 °C	-10 ÷ +50 °C	-10 ÷ +50 °C
Weighing pan dimensions	ø 60 mm (for filters), ø 16 mm	ø 16 mm	ø 26 mm
Weighing chamber dimensions	ø 90 × 90 mm	ø 90 × 90 mm	ø 90 × 90 mm
Weighing device dimensions	411 × 163 × 183 mm	411 × 163 × 183 mm	411 × 163 × 183 mm
Net weight	9.1 kg	9.1 kg	9.1 kg
Gross weight	16.6 kg	16.6 kg	16.6 kg
Packaging dimensions	660 × 660 × 455 mm	660 × 660 × 455 mm	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 ÷ +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.

	MYA 11.4Y	MYA 11/52.4Y	MYA 21.4Y
Maximum capacity [Max]	11 g	11 g / 52 g	21 g
Minimum load	50 µg	50 µg / 500 µg	50 µg
Readability [d]	1 µg	1 µg / 10 µg	1 µg
Verification scale interval [e]	1 mg	1 µg	1 mg
Tare range	-11 g	-52 g	-21 g
Repeatability*	1.2 µg (Rt ≤ 2 g) 2 µg (2g < Rt ≤ 5 g) 2.5 µg (5 g < Rt ≤ 11 g)	2 µg (Rt ≤ 2 g) 2.5 µg (2 g < Rt ≤ 11 g) 3 µg (11 g < Rt ≤ 21 g) 5 µg (21 g < Rt ≤ 31 g) 10 µg (31 g < Rt ≤ 52 g)	1.2 µg (Rt ≤ 1g) 2 µg (1 g < Rt ≤ 5 g) 2.5 µg (5 g < Rt ≤ 11 g) 3 µg (11 g < Rt ≤ 21 g)
Linearity	±6 µg	±10 µg / ±30 µg	±7 µg
Eccentric load deviation	6 µg	6 µg / 10 µg	7 µg
Sensitivity temperature drift**	$1 \times 10^{-6} / ^\circ\text{C} \times \text{Rt}$	$1 \times 10^{-6} / ^\circ\text{C} \times \text{Rt}$	$1 \times 10^{-6} / ^\circ\text{C} \times \text{Rt}$
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$
Minimum weight (U=1%, k=2)	0.24 mg	0.4 mg	0.24 mg
Minimum weight (USP)	2.4 mg	4 mg	2.4 mg
Stabilization time	max 10 s	max 10 s	max 10 s
Adjustment	internal	internal	internal
Verification	Yes	Yes	Yes
OIML Class	I	I	I
Indicator fastening	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***
Display	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen
Keypad	8 keys	8 keys	8 keys
Protection class	IP 43	IP 43	IP 43
Databases	19	19	19
Touch-free operation	2 programmable proximity sensors	2 programmable proximity sensors	2 programmable proximity sensors
USB-A	2	2	2
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit
RS 232	2	2	2
Wireless connection	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
IN/OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT
Power supply	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC
Power consumption	10 W	10 W	10 W
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Atmospheric humidity****	40 ÷ 80%	40 ÷ 80%	40 ÷ 80%
Transport and storage temperature	-10 ÷ +50 °C	-10 ÷ +50 °C	-10 ÷ +50 °C
Weighing pan dimensions	ø 26 mm	ø 40 mm, ø 26 mm	ø 26 mm
Weighing chamber dimensions	ø 90 × 90 mm	ø 90 × 90 mm	ø 90 × 90 mm
Weighing device dimensions	411 × 163 × 183 mm	411 × 163 × 183 mm	411 × 163 × 183 mm
Net weight	9.1 kg	9.1 kg	9.1 kg
Gross weight	16.6 kg	16.6 kg	16.6 kg
Packaging dimensions	660 × 660 × 455 mm	660 × 660 × 455 mm	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 ÷ +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.

	MYA 21/52.4Y	MYA 31.4Y	MYA 52.4Y
Maximum capacity [Max]	21 g / 52 g	31 g	52 g
Minimum load	50 µg / 500 µg	50 µg	50 µg
Readability [d]	1 µg / 10 µg	1 µg	1 µg
Verification scale interval [e]	1 µg	1 µg	1 mg
Tare range	-52 g	-31 g	-52 g
Repeatability*	2 µg (Rt ≤ 2 g) 2.5 µg (2 g < Rt ≤ 11 g) 3 µg (11 g < Rt ≤ 21 g) 5 µg (21 g < Rt ≤ 31 g) 10 µg (31 g < Rt ≤ 52 g)	2 µg (Rt ≤ 5 g) 2.5 µg (5 g < Rt ≤ 11 g) 3 µg (11 g < Rt ≤ 21 g) 5 µg (21 g < Rt ≤ 31 g)	2 µg (Rt ≤ 5g) 2.5 µg (5 g < Rt ≤ 11 g) 3 µg (11 g < Rt ≤ 21 g) 5 µg (21 g < Rt ≤ 31 g) 10 µg (31 g < Rt ≤ 52 g)
Linearity	±10 µg / ±30 µg	±8 µg	±10 µg
Eccentric load deviation	6 µg / 10 µg	8 µg	10 µg
Sensitivity temperature drift**	$1 \times 10^{-6} / ^\circ\text{C} \times \text{Rt}$	$1 \times 10^{-6} / ^\circ\text{C} \times \text{Rt}$	$1 \times 10^{-6} / ^\circ\text{C} \times \text{Rt}$
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$
Minimum weight (U=1%, k=2)	0.4 mg	0.4 mg	0.4 mg
Minimum weight (USP)	4 mg	4 mg	4 mg
Stabilization time	max 10 s	max 10 s	max 10 s
Adjustment	internal	internal	internal
Verification	Yes	Yes	Yes
OIML Class	I	I	I
Indicator fastening	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***
Display	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen
Keypad	8 keys	8 keys	8 keys
Protection class	IP 43	IP 43	IP 43
Databases	19	19	19
Touch-free operation	2 programmable proximity sensors	2 programmable proximity sensors	2 programmable proximity sensors
USB-A	2	2	2
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit
RS 232	2	2	2
Wireless connection	802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
IN/OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT
Power supply	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC
Power consumption	10 W	10 W	10 W
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Atmospheric humidity****	40 ÷ 80%	40 ÷ 80%	40 ÷ 80%
Transport and storage temperature	-10 ÷ +50 °C	-10 ÷ +50 °C	-10 ÷ +50 °C
Weighing pan dimensions	ø 40 mm. ø 26 mm	ø 26 mm	ø 26 mm
Weighing chamber dimensions	ø 90 × 90 mm	ø 90 × 90 mm	ø 90 × 90 mm
Weighing device dimensions	411 × 163 × 183 mm	411 × 163 × 183 mm	411 × 163 × 183 mm
Net weight	9.1 kg	9.1 kg	9.1 kg
Gross weight	16.6 kg	16.6 kg	16.6 kg
Packaging dimensions	660 × 660 × 455 mm	660 × 660 × 455 mm	660 × 660 × 455 mm

Rt net weight

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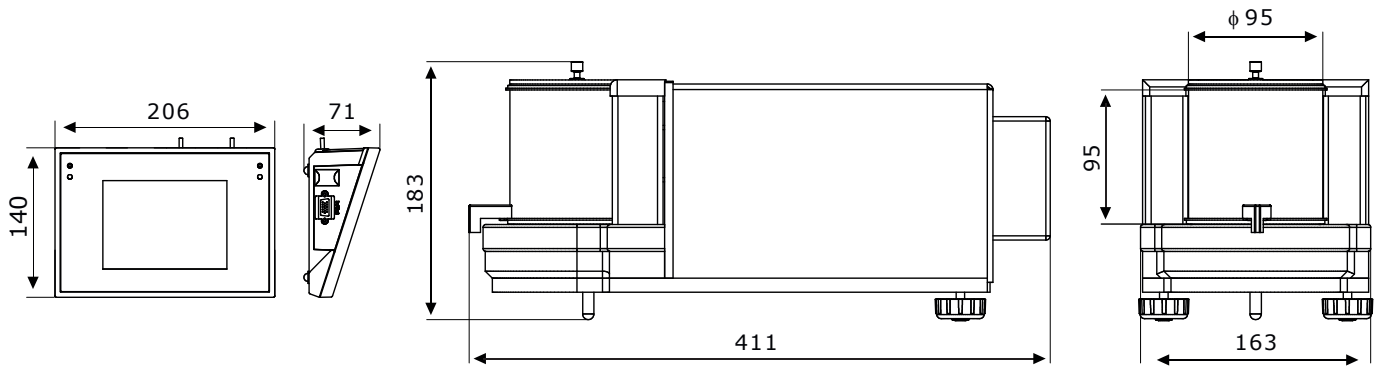
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Dimensions



Accessories

Weighing Tables

- granite weighing table
- antivibration tables for laboratory balances

Ambient Conditions

- DJ-05 anti-static ionizer
- THB-Y ambient conditions module

Peripheral Devices

- Epson dot matrix printer
- barcode scanners
- WD-5/3Y LCD display

Cables, Converters

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

Electrical Accessories

- ZR-02 power supply with battery

Dedicated Software

LabView Driver

- operation of RADWAG balances in LabView environment

R-LAB

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

RADWAG Remote Desktop

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