



RADWAG MYA 5.4Y.F1.B Micro 160 mm Filter Weighing Balance with Wireless Terminal 5.1 g x 0.001 mg

Microbalance MYA 4Y series is designed to meet the highest requirements for determination of mass. Measurement reliability and accuracy are maintained by system of automatic internal adjustment / calibration.



**Capacity x
Readability**

5.1 g x 0.001 mg

Pan Size

160 mm (Diameter)

Manufature:

RADWAG

SKU:

MYA-5.4Y.F1.B

Free Ground Shipping
within the 48 continental
US States

**Please Call
(800)832-0055**

Features

Microbalance MYA 4Y series is designed to meet the highest requirements for determination of mass. Measurement reliability and accuracy are maintained by system of automatic internal adjustment / calibration.

Microbalance comprises two major components (an electronic module and a precise mechanical measuring system which are enclosed separately). The device design eliminates an influence of heat sourcing from instruments electronics on its mechanical components and additionally protects it from shocks and vibrations caused by users operating the instrument.

All the elements of a microbalance are made of glass and steel which eliminates an impact of electrostatics on weighing process.

- **Faster measurement with the new CPU** - 4Y balances feature Dual Core 2 x 1 GHz processor which delivers noticeable performance improvements including faster operation and shorter stabilization time retaining high repeatability values.
- **Monitoring and elimination of electrostatics** - Installation of an additional deionizer module

in a weighing chamber facilitates automatic detection and elimination of electrostatics effect to which both, sample and container intended for measurement may be subjected.

- **8 GB of memory – more data management possibilities** - 8 GB of memory offers possibility of recording data in a form of complex reports. Time and statistic data diagrams on series of weighments are another useful option.
- **The best possible repeatability and USP regulations conformity** - The best weighing accuracy and repeatability – with $s_d = 1d$ combined with USP regulations conformity (Section 41 and 1251) make 4Y balances a new standard for mass measurement quality.
- **Ergonomics and safety** - Wireless communication between balance terminal and a weighing unit make it possible to comfortably operate 4Y series balances in laminar air flow cabinets and fume cupboards.
- **Remote control operation** - Wireless Connection offers wireless transfer of data recorded by 4Y balance to any portable device powered by iOS or Android systems using special applications intended for data management.
- **Data safety** - Every single 4Y balance features ALIBI memory designed to provide protection and automatic recording of your measurements. Options such as data preview, copying and archiving are also available to users.

FEATURES

- **ELECTRONIC LEVEL INDICATOR**
Functions:
 - ALARM (out of tolerance notification)
 - graphic level indicator
 - programmable acceptable tilts
- **DATA EXCHANGE THROUGH USB STORAGE DEVICES**
 - update balance software
 - export weighing data
 - export/import databases
 - export/import balance settings
 - exchange data between balances
- **INFRARED PROXIMITY SENSORS** Functions:
 - PRINT function
 - TARE function
 - sensors sensitivity adjustment
- **COMMUNICATION INTERFACES**
 - Ethernet
 - 2×RS 232
 - 2×USB
 - additional display port
- **PORTABILITY** Extra option:
Balances with a wireless terminal

FUNCTIONS

- **AUTOTEST** - Diagnostic function aiming at metrological parameters determination (repeatability), the parameters are determined for the actual conditions of use. When speaking of repeatability it may be also used for weighing time optimization. Autotest is operated in an automatic mode thus operator's time is saved.
- **CHECKWEIGHING** - Checkweighing function is used for checking whether the measured sample mass is within the predefined threshold values, Low [LO] and Hgh [HI]. The thresholds are given in [g] and [kg] units. Current state of a sample being measured is signalled by means

of pictograms located on a display for laboratory balances, for industrial scales Stacklight System is used. This visual /- inspection is in operation during segregation, control or packing process of products for which mass has been determined with a specified tolerance, eg. 12860 g 961

- **DOSING** - Weighing process for which reference mass has been determined together with tolerance for its determination. Dosing tolerance is given in [%] and it is calculated in relation to the reference value thus being a permissible deviation of this process. This solution is used for weighing powders, liquids and loose materials. Dosing function performance is often supported with bargraph - load indicator. For industrial scales it is possible to use a control systems of dosing process
- **PIPETTES CALIBRATION** - Function verifying correctness of piston pipettes functioning, the verification is performed via gravimetric measurement of the excreted liquid. Pipettes calibration may be either a stand-alone module or it may be operated
- **AIR DENSITY CORRECTION** - Function performing correction of mass measurement indication, wherein the air density is taken into account. It is used in balances with reading unit < 0,01 mg.
- **PARTS COUNTING** - Function using mass measurement for determination of measured items quantity. Mass of a single item is required for this process. It may be either estimated through weight or taken from a database. For items counting the following algorithm is used: all items mass / single item mass = quantity. Function operation is supported by a mechanism of Automatic Correction of Accuracy. This allows to update single item mass in course of the process. To a certain extent Automatic Correction of Accuracy eliminates error which may be a result of different mass values of seemingly alike single elements. For industry solutions items counting may be simultaneously carried out with checkweighing and dosing thus industry solutions feature audio signalling base informing that specified number of items has been weighed. It is possible to apply weighing systems using few platforms of different MAX capacities and different accuracies.
- **PERCENT SETUP** - Percent setup function is used for comparison of measured products with mass standard. Mass of a mass standard may be a numeric value taken from a database or it may be determined through a measurement process. Each measured product is compared to mass standard, mass of which is presumed as a model 100% ideal mass. For products weighing less than the mass standard, obtained results are lower than 100%, for products weighing more, the obtained results are greatly exceeded.
- **NEWTON UNIT MEASUREMENT** - Function allowing to perform the measurement in Newton unit, it may be used for processes aiming to determine force resulting in the sample damage
- **GLP PROCEDURES** - Diagnostic function allowing to objectively document performed measurements. GLP procedures may be either presented in a short report form or extended one.
- **AUTOMATIC SLIDING DOOR** - Door opened automatically
- **ALIBI MEMORY** - The used ALIBI memory is a data secure area and allows to record up to 100 000 weight records. It ensures security of constant data register in the long time period.
- **FORMULATION** - Function supporting the mixture making process, wherein the mixture contains various components. Formulation function usually uses the balance/scale database of components. Formulation serves for monitored checkweighing of every single component with a given tolerance. It is enriched with a set of individual settings.
- **IR SENSORS** - Programmable function supporting the weighing process through control of the following options: sliding weighing chamber doors, printout, zeroing, tarring etc. Especially appreciated wherever preventing the balance from soiling is important
- **STATISTICS** - Statistics function registers and analyses performed measurements. This supplies the user with the following information: Max and Min standard deviation, average value, variance, range et.
- **ANIMAL WEIGHING** - Process of mass determination for a product which may unwillingly reposition within the weighing pan. Mass determination in such cases requires much longer period of time when compared to typical weighing process. It is the user who defines period of time needed for control of measured product mass. The user can thus optimize the function

depending on the measured product characteristics.

Specifications

Model	MYA-5.4Y.F	MYA-5.4Y.F1	MYA-21.4Y.P
Model with Wireless Terminal	MYA-5.4Y.F.B	MYA-5.4Y.F1.B	MYA-21.4Y.P.B
Model with Auto Level	MYA 5.4Y.F PLUS	MYA 5.4Y.F1 PLUS	MYA 21.4Y.P PLUS
Model with Wireless Terminal and Auto Level	MYA 5.4Y.F PLUS.B	MYA 5.4Y.F1 PLUS.B	MYA 21.4Y.P PLUS.B
Capacity x Readability	5.1 g x 1 µg	5.1 g x 1 µg	21 g x 0.1 µg
Tare range	-5.1 g	-5.1 g	-21 g
Linearity	± 5 µg	± 5 µg	±7 µg
Eccentric load deviation	5 µg	5 µg	7 µg
Repeatability	1.6 µg	1.6 µg	1.2 µg
Sensitivity offset	$1.5 \times 10^{-6} \times R_t$		$4 \times 10^{-6} \times R_t$
Sensitivity temperature drift	$1 \times 10^{-6} / ^\circ\text{C} \times R_t$		
Sensitivity stability	$1 \times 10^{-6} / \text{Year} \times R_t$		
Minimum weight (USP)	2 mg	3.2 mg	2.4 mg
Minimum weight	0.2 mg	0.32 mg	0.24 mg
Pan size	Ø 100 mm Ø 26 mm	Ø 160 mm Ø 26 mm	Ø 26 mm
Weighing chamber dimensions	Ø 118 × 35 mm	Ø 168 × 35 mm	Ø 90 × 90 mm
Stabilization time	max 8 s		max 10 s
Working temperature	+10 ÷ +40 °C		
Working temperature change rate	±0,3 °C/h (±1 °C/8h)		

Adjustment / Calibration	automatic (internal)
Atmospheric humidity	40% ÷ 80%
Atmospheric humidity change rate	±1%/h (±4%/8h)
Display	5.7" color resistive touch screen
Power supply	13.5 ÷ 16 V DC / 700 mA
Casing of the terminal	ABS plastic
Processor	2 × 1 GHz
Memory	RAM: 256 MB DDR2, flash: 8 GB microSD
Interface	2×USB, 2×RS 232, Ethernet, 4Inputs/4Outputs, Wireless Connection
Net weight/Gross weight	10.2/14.7 kg

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