

### **5Y ELLIPSIS** Laboratory Balances

www.radwag.com

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BB AN Den 1.158 kg/m3

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Liquid

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Supplementary unit

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### UYA 5Y Ultra-microbalances MYA 5Y Microbalances

### [d] down to 0.1 µg [Max] up to 52 g



**UYA 5Y** Ultra-microbalances

MYA 5Y Microbalances

- World's lowest reading unit [d] 0.1 μg
- Weighing range up to [Max] 52 g
- The lowest minimum weight [USP] 0.3 mg
- Automatic, draft-proof weighing chamber
- Fully automatic levelling system
- Wide variety of applications



UYA 5Y.F Ultra-microbalances for filters

**MYA 5Y.F** Microbalances for filters



MYA 5Y.P Microbalances for pipette calibration

### XA 5Y.M Microbalances

[d] down to 1 µg [Max] up to 53 g



XA 5Y.M Microbalances

- Reading unit [d] 1 µg
- Spacious weighing chamber: 199 x 157 x 218 mm
- Large weighing pan: ø 30 mm
- Integrated ionizer
- Tool-free disassembly of the chamber



#### XA 5Y.M.P Microbalances for pipette calibration



**XA 5Y.M.S** Microbalances for stents

### XA 5Y Analytical Balances

[d] down to 0.01 mg [Max] up to 520 g



**XA 5Y** Analytical balances

- Reading unit [d] 0.01 mg
- Minimum weight: 10 mg
- Conditioning shelf
- Open-work weighing pan
- Integrated ionizer
- Tool-free disassembly of the chamber

### AP-12.5Y Automatic Device for Multichannel Pipette Calibration



#### AP-12.5Y

Automatic Device for Multichannel Pipette Calibration

- For calibration of 1-channel and multichannel pipettes starting at 10 μl
- Calibration of up to 12-channel fixed-volume and variable-volume pipettes
- Ambient conditions monitoring
- Semi-automatic levelling system
- Internal adjustment

### PM 5Y Precision Balances

### [d] down to 0.01 g [Max] up to 60 kg



**PM 5Y** Precision balances

- One of the most innovative balance in the world with [Max] = 20 kg and [d] = 0.01 g
- Large weighing pan: 200 x 185 mm
- Innovative MONOBLOCK® weighing module
- Diagnostic tools in accordance with metrological requirements: sensitivity test
- Wide variety of applications

# PM 20.5Y

The PM 20.5Y laboratory balance by Radwag is one of the most innovative in the world that can weigh up to 20 kg with 0.01 g readability, using a large 200 x 185 mm weighing pan.

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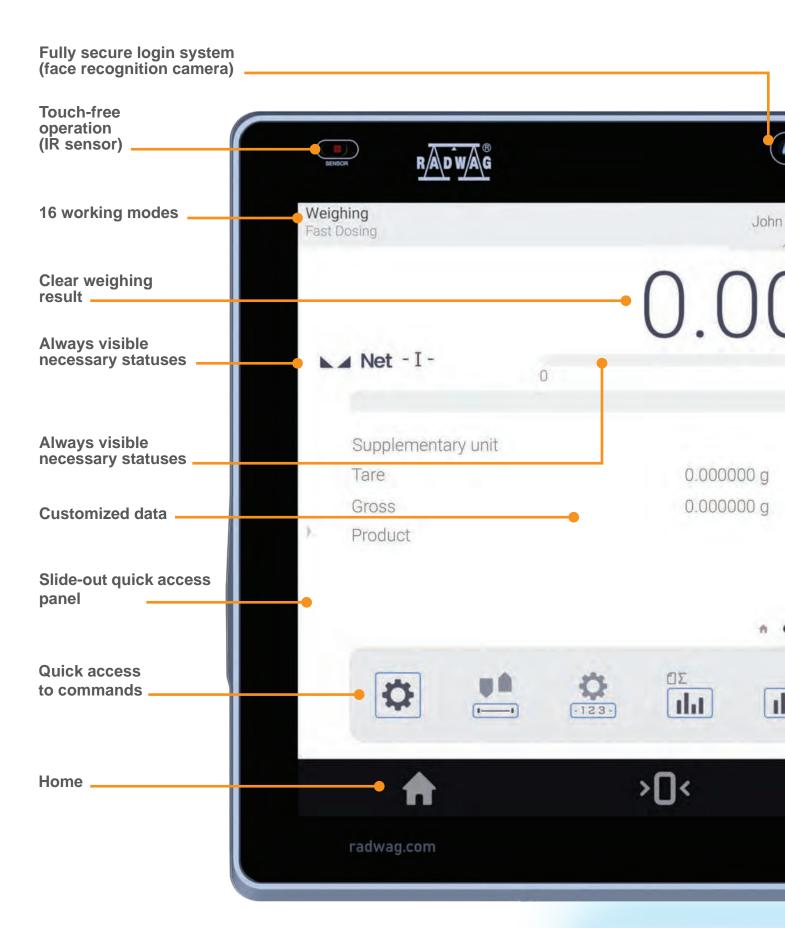
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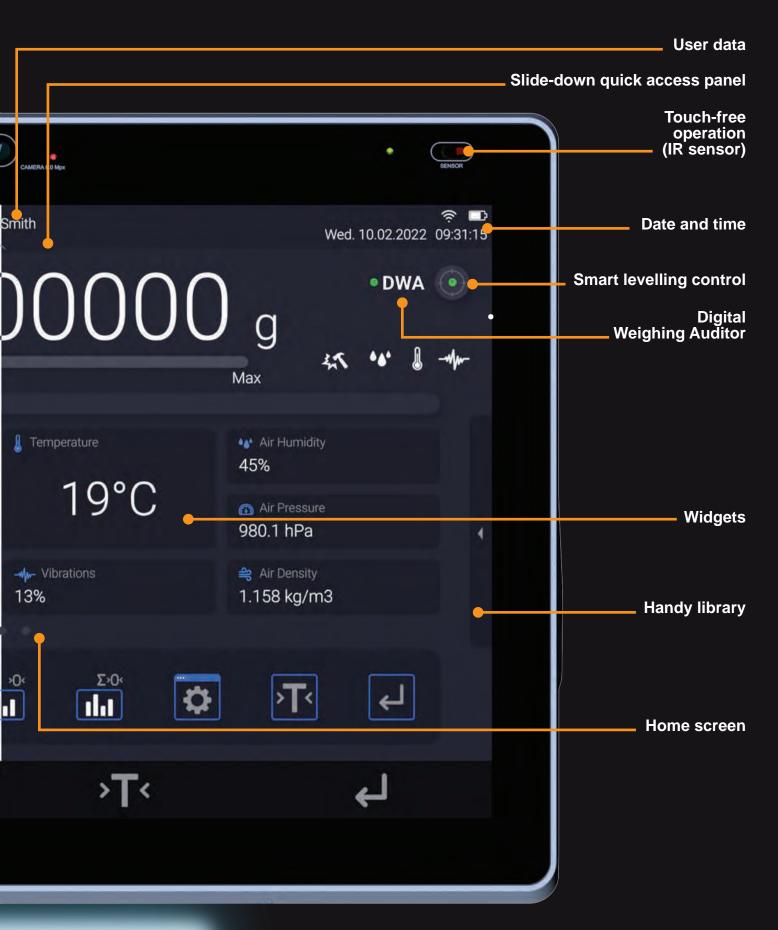
### **Two Faces**

### Light mode



### of ELLIPSIS

### Dark mode



### Ambier

Innovative way of user - balance communication.

### One look and everything's clear.







### nt Light



It couldn't be easier: the backlight colour informs you about status, process results, procedures, or alerts.

- statuses
- process results
- procedures
- alerts



### **Connecting ELLIPSIS**





(printer, computer, barcode scanner)

### Compliance confirmation

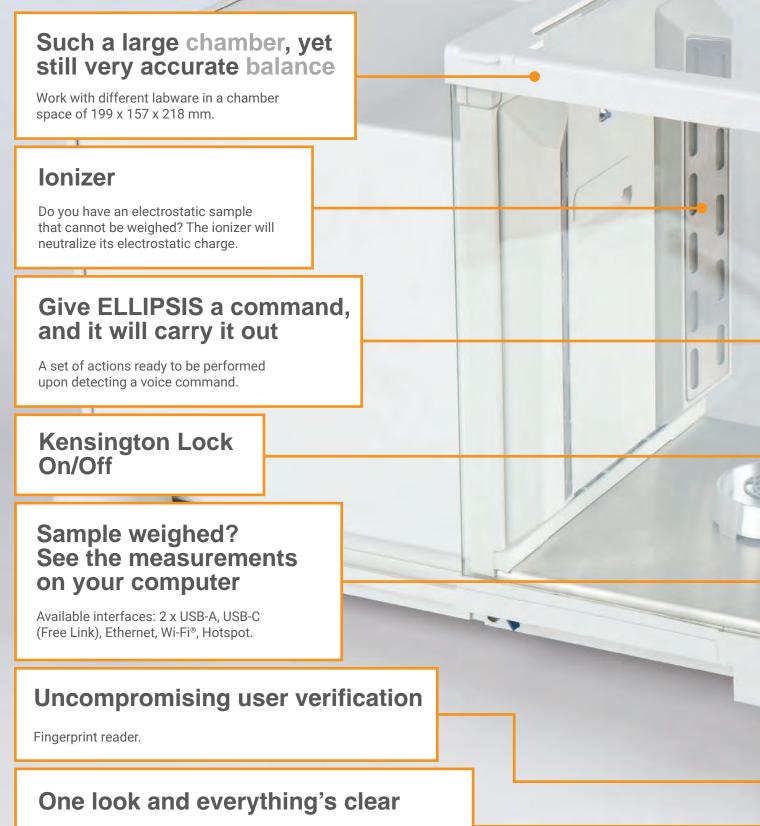
- 21 CFR Part 11
- DWA
- GMP
- Qualifications
- Validations
- Quality system
- and more



5Y ELLIPSIS Laboratory Balances

### **Discover ELLIPSIS**

The lowest minimum weight of 0.3 mg, achievable with modern weighing module.



It couldn't be easier: the backlight colour informs you about status, process results, procedures, or alerts.

### Tool-free disassembly of the weighing chamber

Contaminated weighing chamber? You don't need any tools to disassemble and clean the ELLIPSIS weighing chamber.



### Terminal tilt adjustment

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### RFID

### Always the correct choice of a product or ingredient for a formulation.

ELLIPSIS works with RFID tags that can be used to tag your products or formulation ingredients in the database. It can also be used to identify a user.



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### Hotspot

No space in your fume cupboard or access to the weighing terminal (glovebox)? Or maybe you want to operate the balance remotely?

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Thanks to the hotspot, you can operate the balance on any device previously connected to it. This can be a smartphone, tablet, or computer.

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### Widgets

Always at hand, grouped so that the essentials never slip away.



#### Up-to-date information on ambient conditions





### **Looking for More** than Just Weighing?

### Working modes



#### Weighing

Basic working mode that displays the mass of a sample.

Checkweighing

Control of sample mass

Percent weighing

in the set min/max

thresholds.

Percent mass

control.



#### Parts counting

Quick counting of samples of similar mass.



#### Dosing

Weighing to a target value.



#### Density

Determining the density of solids and liquids.



#### **Formulations**

Weighing of predefined ingredients, according to the order described in the formulation.



SQC

#### **Pipette calibration**

Checking piston pipettes according to customer-specific requirements or ISO 8655.

SQC

Statistical mass control with set thresholds.

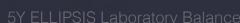
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#### Mass control

Statistical control of samples of similar mass.

#### PGC

Statistical mass measurement in accordance with Packaged Goods Control.



p 00000 e 00000 o00000 g Calcium 0.003 g 13% Good

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John Smith

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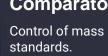
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mass on the pan.





C

#### over a set period of time.

Animal weighing

Control of mass change

#### **Statistics**

Real-time statistics out weighings.

#### Differential weighing

Analysing the change in mass of a single sample over time.

Control of the maximum



ELLIPSIS - Wagi Laboratoryine 5Y

determined from carried

Peak hold

### **Note Down Your Conclusions**

One of ELLIPSIS' innovative features is the ability to add a voice or text note to a series of measurements or a procedure report.

1 C C E he determined value of the minimum Weight for the process: 0.3 mg A 0 9 1 43 2 7 6 × 1 I 5 84 × TA 4 0/0 3 5 2 # POISKI 0 23 ABC **5Y ELLIPSIS Laboratory Balances** 

### Do You Like to Analyse Data From a Series of Measurements Presented Graphically?

The balance gives you this possibility. You can choose between graphs of measurement series, ambient conditions, SQC with thresholds, and Gaussian distribution.





(1) \_\_\_\_\_

0.000000 g

Weighing graph

RADWAG



Ambient conditions graph



SQC graph

trading com





Gaussian distribution graph

### **DWA - Digital Weighing Auditor**

Have you ever wondered if your balance is ready for work? The Digital Weighing Auditor makes sure it is.

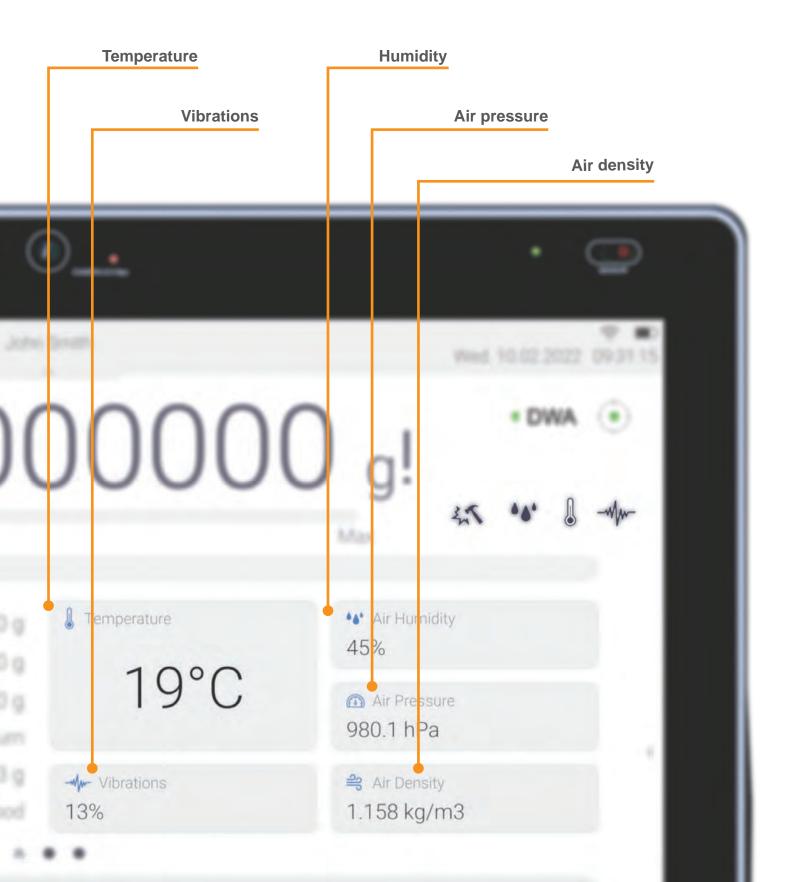
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DWA is a system that monitors ambient conditions (temperature, humidity, pressure, and vibration), balance levelling, adjustment, USP compliance, and ionizer operation. It enables air buoyancy compensation in real-time. What is more, it signals the need for a balance inspection or a periodic audit of the balance's accuracy and sensitivity. ELLIPSIS signals the results of the digital audit via Ambient Light, pictograms on the home screen, or a speaker.

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)0000	g!	• DWA	$\odot$	• DWA
	Max 45	•••	-Mm-	• DWA
Temperature	<ul><li>Air Humidity</li><li>45%</li></ul>			• DWA
19°C	<ul><li>Air Pressure</li><li>980.1 hPa</li></ul>			
	<ul><li>air Density</li><li>1.158 kg/m3</li></ul>			
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# Are the Conditions in Your Laboratory the Best for the Balance You Have?

ELLIPSIS monitors temperature, humidity, pressure, and vibration. The results are displayed as graphs or a widget on the home screen. Unsuitable conditions for the balance are signalled by DWA. And all of this is recorded in a dedicated database.



## What Was the Value of the Previous Measurement?

ELLIPSIS always displays the history of the last 20 measurements on the slide-out panel. It is also here where the measurement series ready for e-signature, in accordance with 21 CFR Part 11, can be found.

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John Smith	Wed. 02	.02.2022 09:31:15
100000	Weighing reco	rds
0.000000	2022.01.31 14:09:38	0.000019 g
M	2022.01.31 (14:09:18)	0.000019 g
	2022.01.31 0 14:08:55	0.000020 g
0.000000 g	2022.01.31 14:08:42	0.000018 g
0.000000 g 19°C	2022.01.31 (D) 14:08:12	0.000019 g
Calcium 9	2022.01.31 14:07:54	0.000017 g
0.003 g	2022.01.31 (a) 14:07:35	0.000020 g
Good 13% 1	2022.01.31 (0) 14:07:11	0.000019 g
n • •	2022.01.31 (14:06:58	0.000019 g
	2022.01.31 14:06:39	0.000018 g
	2022.01.31	0.000019 a
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# Have You Ever Failed to Record the Weighing Result?





### Don't Take Our Word for It?

#### With ELLIPSIS, you can get:

- Declaration of conformity
- Calibration certificate
- IQ, OQ, PQ documents
- 21 CFR Part 11 qualification
- USP compliance qualification
- Compliance with the latest version of the Pharmacopoeia





### 21 CFR Part 11

#### EU GMP Annex 11



- Password strength settings
- Maximum number of incorrect login attempts
- Auto-logout of inactive user
- Permissions for non-logged-in users
- Permissions for electronic signature
- Permissions for databases management
- Creating database backup
- Adding respectively secured users
- Adding and editing databases according to permissions granted
- Replacing paper documents with digital ones

- Highest level of report security
- Separate database with saved reports
- Signature information
- Validation of the electronically signed report
- Comments on the report
- Three validation levels
- Automatic recording of changes in databases
- Audit trail preview
- Export of audit trail data

Do you work in the pharmaceutical industry? Do you need a digital signature? We are offering the laboratory balance which as a standalone fully meets the requirements of 21 CFR Part 11 / EU GMP Annex 11.

### Applications

If you use labware, weigh stents or filters, or want to check your pipette, use the ELLIPSIS accessories available:



Microscale glassware



**Stents** 



**Pipette calibration adapters** 



**Filters** 

### **Technical Specification**

#### **Ultra-Microbalances**

	Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
197	WL-109-0001	UYA 2.5Y	2.1 g	0.1 µg	0.15 µg	ø 16 mm
1.11.	WL-109-0002	UYA 6.5Y	6.1 g	0.1 µg	0.2 µg	ø 16 mm
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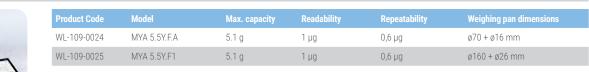


Pr	roduct Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
WI	L-109-0003	UYA 2.5Y.F	2.1 g	0.1 µg	0.15 µg	ø 16 mm, ø 70 mm

#### Microbalances

	AM 1.1		B 1199	<b>D 1</b> 1 111	
Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
WL-109-1000	MYA 0,8/3.5Y	0.8/3 g	1/10 µg	0.6 µg	ø16 + ø60 mm
WL-109-0004	MYA 2.5Y	2.1 g	1 µg	0.41 µg	ø16 mm
WL-109-0006	MYA 5.5Y	5.1 g	1 µg	0.6 µg	ø26 mm
WL-109-0007	MYA 6.5Y	6.1 g	1 µg	0.6 µg	ø26 mm
WL-109-0008	MYA 11.5Y	11 g	1 µg	0.45 µg	ø26 mm
WL-109-1001	MYA 11/52.5Y	11/52 g	1/10 µg	1.5 µg	ø26 + ø40 mm
WL-109-1002	MYA 21/52.5Y	21/52 g	1/10 µg	1.5 µg	ø26 + ø40 mm
WL-109-0010	MYA 21.5Y	21 g	1 µg	1 µg	ø26 mm
WL-109-0011	MYA 31.5Y	31 g	1 µg	1.2 µg	ø26 mm

#### **Microbalances for Pipette Calibration**



#### **Microbalances for filters**

Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
WL-109-0023	MYA 21.5Y.P	21 g	1 µg	1 µg	ø26 mm

#### Microbalances

	Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
	WL-109-0013	XA 6.5Y.M	6.1 g	1 µg	0.8 µg	ø30 mm
~	WL-109-1003	XA 6/21.5Y.M	6/21 g	1/2 µg	1.3 µg	ø30 mm
7	WL-109-0015	XA 21.5Y.M	21 g	1 µg	1.3 µg	ø30 mm
	WL-109-1004	XA 21/52.5Y.M	21/52 g	1/5 µg	1.5 µg	ø30 mm
	WL-109-0017	XA 52.5Y.M	52 g	5 µg	2.2 µg	ø30 mm
	WL-109-0018	XA 53.5Y.M	53 g	1 µg	1.5 µg	ø30 mm

#### **Microbalances for Pipettes Calibration**

	Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
a	WL-112-1000	XA 6/21.5Y.M.A.P	6/21 g	1/2 µg	1.3 µg	ø26 mm
	WL-112-0001	XA 21.5Y.M.A.P	21 g	1 µg	1.3 µg	ø26 mm
	WL-112-1001	XA 21/52.5Y.M.A.P	21/52 g	1/5 µg	1.5 µg	ø26 mm
-	WL-112-0002	XA 52.5Y.M.A.P	52 g	5 µg	2.2 µg	ø26 mm
	WL-112-0003	XA 53.5Y.M.A.P	53 g	1 µg	1.5 µg	ø26 mm

#### **Microbalances for Stents**



Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions	
WL-109-0026	XA 6.5Y.M.S	6 g	1 µg	1,3 µg	Intended for Stents	

#### **Analytical Balances**

Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
WL-110-0001	XA 52.5Y	52 g	0,01 mg	0,012 mg	ø90 + ø85 mm
WL-110-0004	XA 82/220.5Y	82/200 g	0.01/0.1 mg	0,012 mg	ø90 + ø85 mm
WL-110-0002	XA 110.5Y	110 g	0.01 mg	0,012 mg	ø90 + ø85 mm
WL-110-1000	XA 120 / 250 g	120/250 g	0.01/0.1 mg	0,005 mg	ø90 + ø85 mm
WL-110-0003	XA 210.5Y	210 g	0.01 mg	0,005 mg	ø90 + ø85 mm
WL-110-0006	XA 220.5Y	220 g	0.1 mg	0,07 mg	ø100 mm
WL-110-0007	XA 310.5Y	310 g	0.1 mg	0,05 mg	ø100 mm
WL-110-0008	XA 520.5Y	520 g	0.1 mg	0,07 mg	ø100 mm
WL-109-0011	MYA 31.5Y	31 g	1 µg	1.2 µg	ø26 mm

#### **Pecision Balances**

Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
WL-224-0001	PM 10.5Y	10 kg	0,01 g	0,004 g	200×185 mm
WL-224-0002	PM 15.5Y	15 kg	0,01 g	0,004 g	200×185 mm
WL-224-0003	PM 20.5Y	20 kg	0,01 g	0,004 g	200×185 mm
WL-224-0004	PM 25.5Y	25 kg	0,1 g	0,04 g	350×260 mm
WL-224-0005	PM 35.5Y	35 kg	0,1 g	0,04 g	350×260 mm
WL-224-0006	PM 50.5Y	50 kg	0,1 g	0,04 g	350×260 mm
WL-224-0007	PM 60.5Y	60 kg	0,1 g	0,15 g	400×500 mm
WL-224-0009	PM 120.5Y	120 kg	0,2 g	0,2 g	400×500 mm

#### Automatic Device for Multichannel Pipette Calibration

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Product Code	Model	Max. capacity	Readability	Repeatability	Weighing pan dimensions
WL-101-0416	AP-12.5Y	52 g	0,01 mg	5 µg	12 and 1 chanel case

#### **Moisture Analyzer**

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Product Code Mo	odel N	Max. capacity	Readability	Repeatability	Weighing pan dimensions
WL-307-0006 PM	IV 50.5Y 5	50 g	0,1 mg	-	ø90