



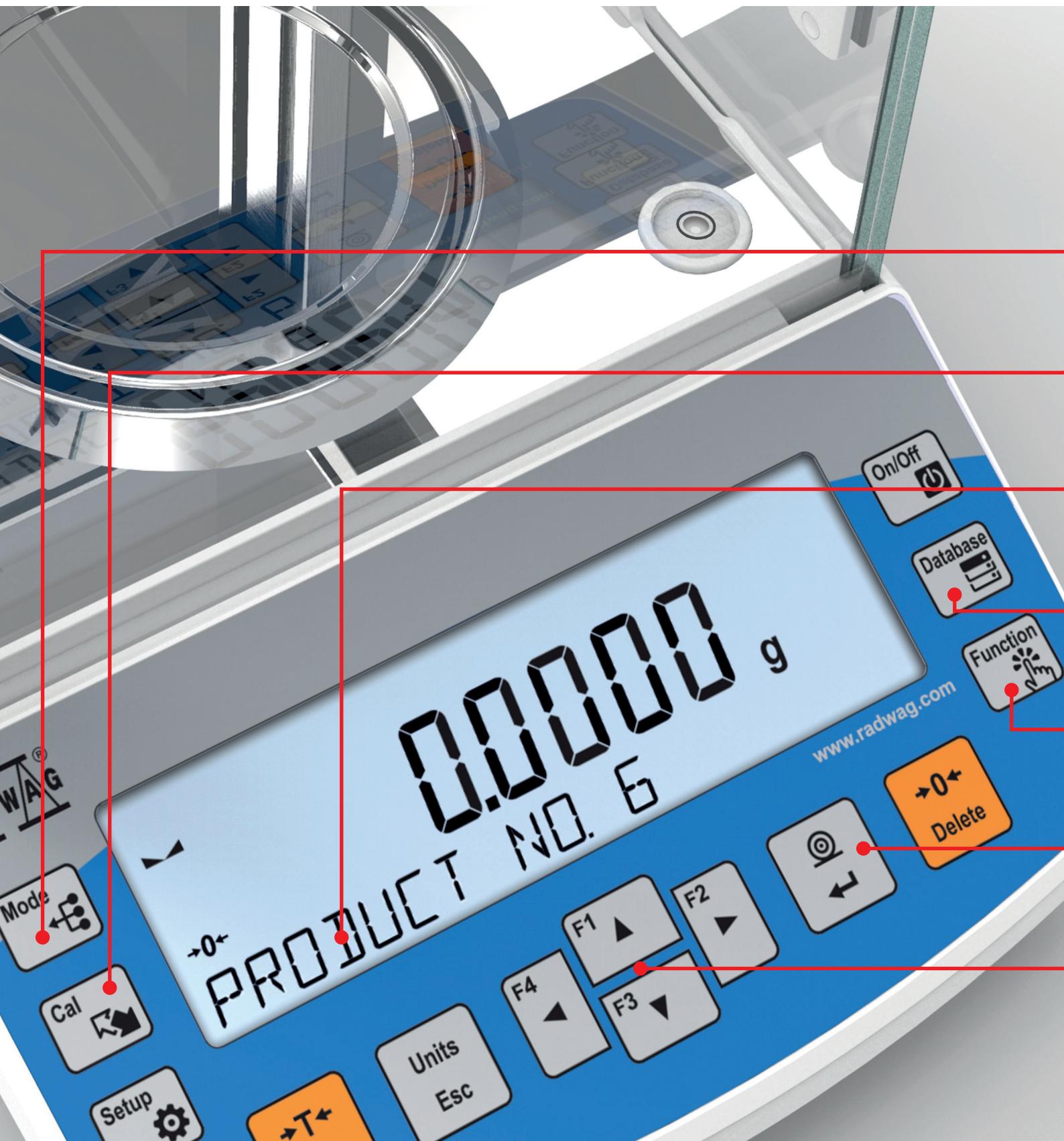
R Series Laboratory Balances

radwag.com



R Series

Laboratory Balances



Innovative solutions of the R series, redefined operation and presentation of weighing results.

The R series balances represent the standard level of precision instruments. They have been equipped with LCD screen, providing even clearer result presentation. To maximize the comfort of operation, the display has been enriched with an extra text line supplying you with either information of prompts on the weighing process (product name, tare, value, etc.).

A new feature of the R series balances is a set of symbols showing a current working mode, type of connection with a computer, battery state, weighing and service functions. Additionally now there are even more weighing units at your disposal (g, mg, etc.). Weighing results are recorded in ALIBI memory.

The R series features a plastic housing and a stainless steel weighing pan, and enables under-pan weighing, where in the load is suspended under the balance.

..... **Working mode selection**

..... **Direct start-up of balance adjustment procedure**

..... **Extra text line**

..... **Direct access to databases**

..... **Access to the particular working mode functions**

..... **Transfer of display state to the peripheral device**

..... **Navigation buttons**



ANALYTICAL BALANCES AS R2, AS R1

Maximum capacity [Max]:
from 60 to 520 g

Readability [d]:
from 0.01 to 0.1 mg

Weighing pan dimensions:
ø90 mm, ø100 mm, ø85 mm (option)



PRECISION BALANCES PS R2, PS R1

Maximum capacity [Max]:
from 200 to 10100 g

Readability [d]:
from 0.001 to 0.01 g

Weighing pan dimensions:
128x128 mm, 195x195 mm

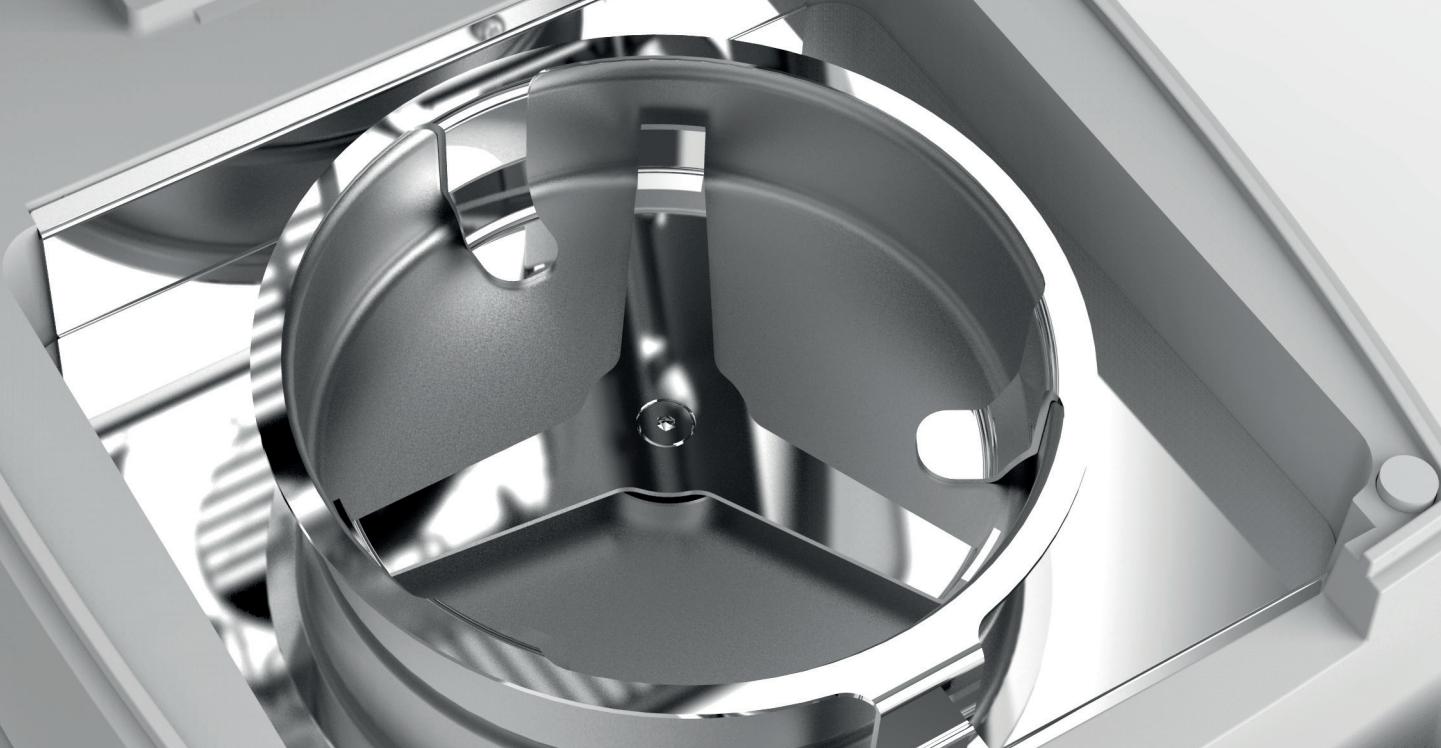
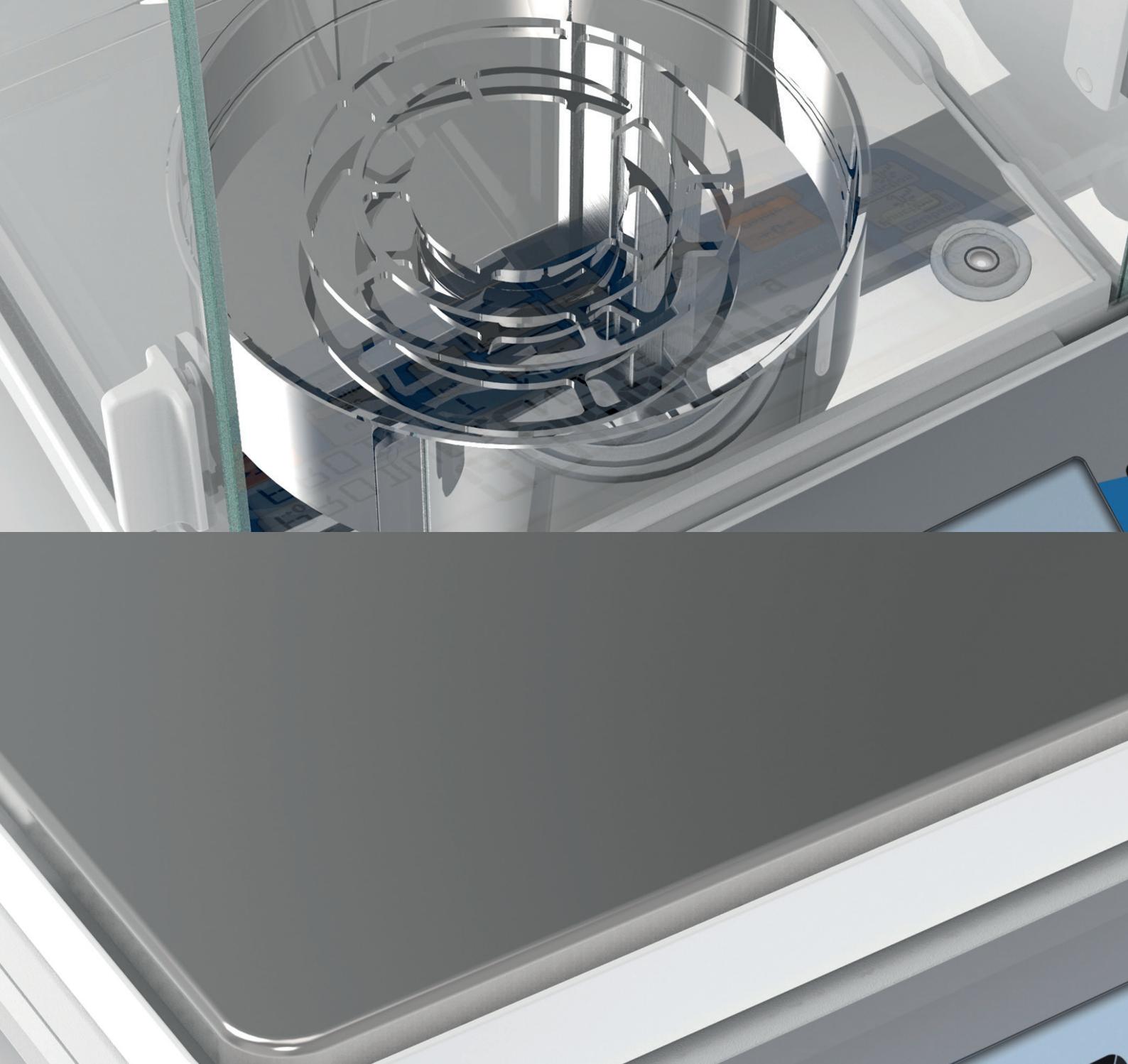


MOISTURE ANALYZERS MA R

Maximum capacity [Max]:
from 50 to 210 g

Readability [d]:
from 0.1 to 1 mg

Weighing pan dimensions:
ø90 mm

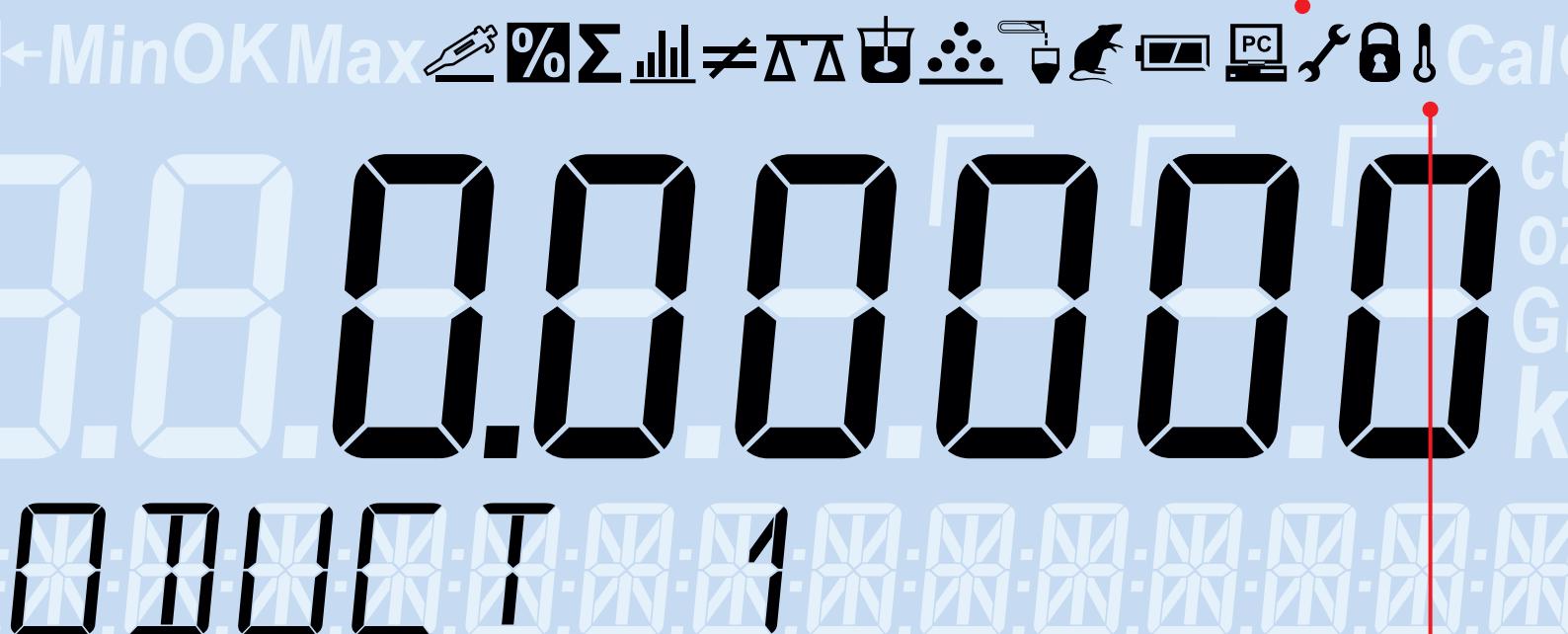


Symbols and units

The R series offers a priceless set of intuitive symbols signalling current working mode, computer connection type, battery status, function that is in operation and much more.

The symbols add to readout clarity, they provide maximum comfort of operation and improve ergonomics. Another facility supporting the weighing process is a wider choice of units.

You may find ambient conditions monitoring especially useful during installation of the balance at its place of use. This solution may also turn out to be exceptionally valuable for observation of ambient temperature variation.



Extra text line

An extra text line provides you with either information or prompts on the weighing process, e.g. product name or tare value.

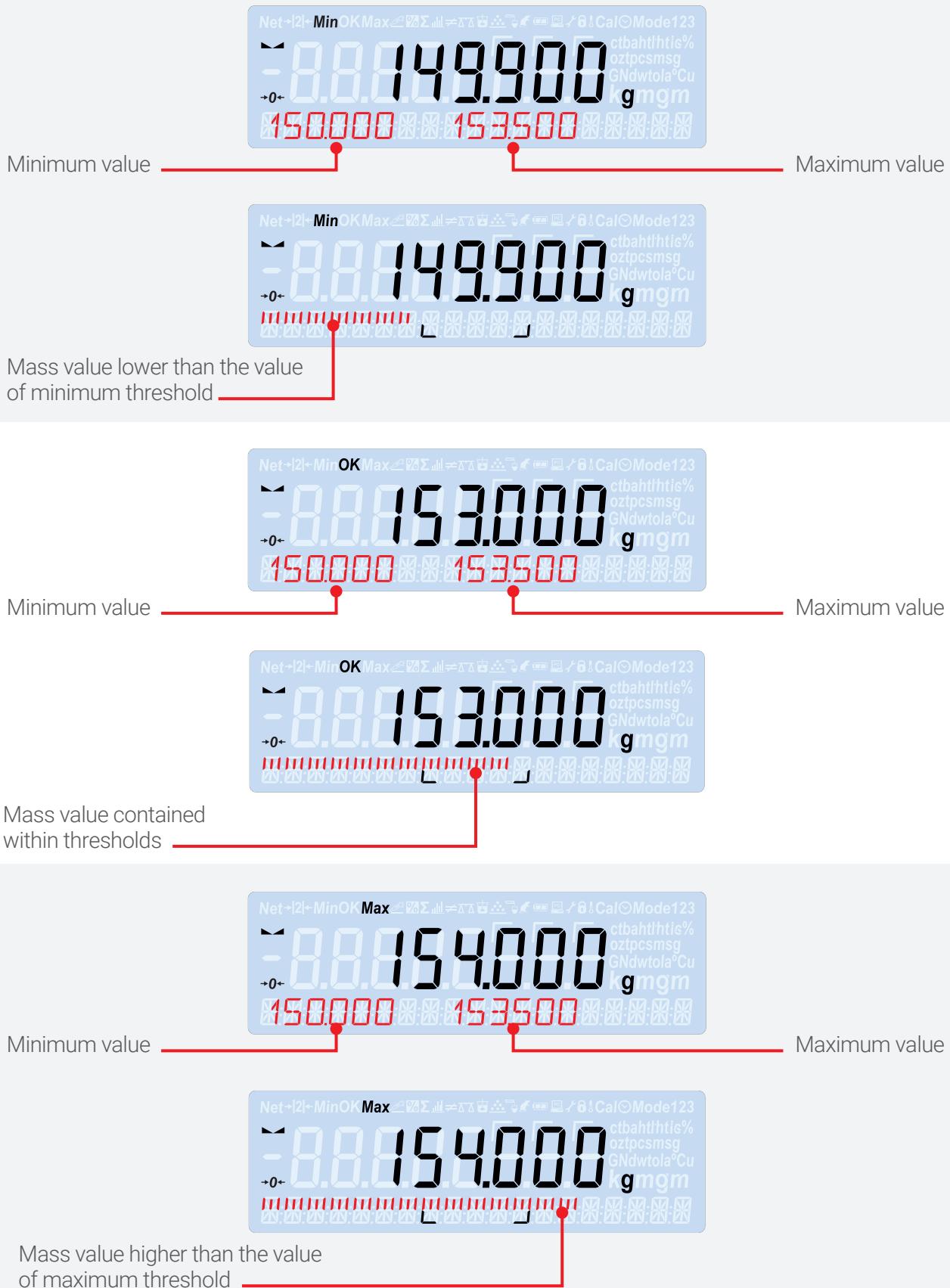
Ambient conditions monitoring

Stable ambient temperature is a key factor when it comes to the accuracy of balance indications. The R series balances feature an ergonomic diagnostic tool, namely, automatic monitoring of balance temperature.

The dynamics of balance temperature variation is registered online. Shall the limit values be exceeded, a thermometer symbol is displayed on the balance screen. This calls for the necessity to stabilize the balance.

Bar Graph, visual representation of load capacity

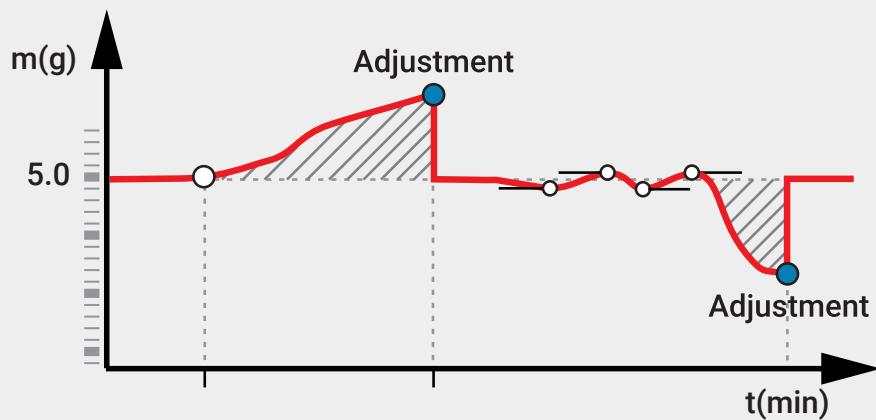
The bar graph indicates the load capacity change in real time. It can be run for various working modes with threshold markers, e.g. parts counting, dosing, percent weighing, animal weighing, statistics, totalizing, peak hold or checkweighing.



Auto-Cal - automatic system of adjustment procedure

Auto-Cal system is a tool for control and correction. It provides accurate weighing regardless of temperature variation, the position of the balance or changing environmental conditions. This allows the R series balances to offer accuracy in all conditions.

The built-in adjustment weight has been designed to maintain accurate indications. Discover that with our automatic or semiautomatic adjustment procedure, performed periodically, you may grow confident about your weighing results' accuracy. The adjustment system guarantees that accurate weighing results are obtained even for challenging working conditions. It is used for GLP, GMP control procedures



Operating temperature range

Now, owing to a wider working temperature range, you don't have to monitor and adjust the room temperature, affecting your balance stability, over and over again.

Databases

You certainly will appreciate information system of the R series balances. The system is based on databases: users, products, weightment and tares.

When operating the new R series balances you can analyze particular measurements in details, export or import any data exchange.

Resistance to ambient conditions

Increased resistance to fluctuating ambient conditions such as breezes and changes in humidity provides more accurate measurements.

AS R1, AS R2, PS R1 & PS R2

2×RS232, 2×USB-A

(interchangeable interface on back and front of case), USB-B, Wi-Fi (option)



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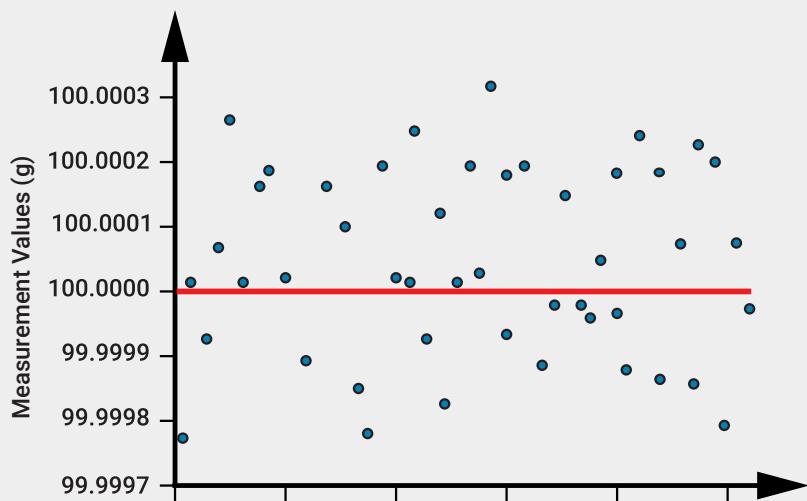
RS232¹, USB-A, USB-B, Wi-Fi[®]



Repeatability of indications

The monolithic system ensures even greater accuracy and repeatability of weighing due to consolidation of elements of the balance's mechanical design. Using such technology results in higher quality balances.

Owing to the monolithic systems, R series balances offer fast measurement and excellent repeatability. These up-to-date design solutions, being highly resistant to transport shocks, are characterized by good metrological parameters.

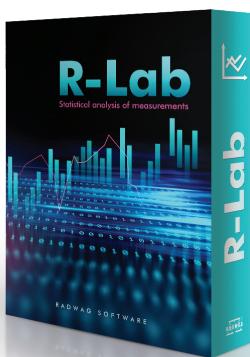
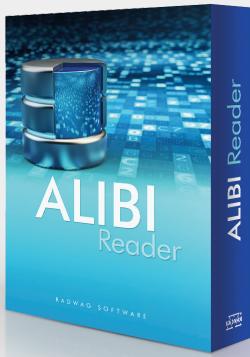


Communication interfaces

The R series balances have been equipped with various means of communication. They offer standard cable connections, realized via USB-A and USB-B or RS 232 ports, and wireless connection, realised via WiFi technology. The latter is supported by all RADWAG manufactured programs.

Security and data control

ALIBI memory guarantees data security and allows for the storage of 512000 records of weighings. Using the ALIBI Reader PC application, it is possible to view all weighings stored in the balance's memory, print and save reports. Weighing reports can be sent to external devices.



Printouts

Measurements of the R series balances can be sent directly to RAD-KEY and R-Lab software.

Working mode	Weighing
Date	14.02.2025
Time	14:10:18
Balance type	AS 120.R2
Balance ID	4100
Product	Pill 02

User	Operator 1
Net	0.30200 g
Tare	0.50000 g
Gross	0.80200 g

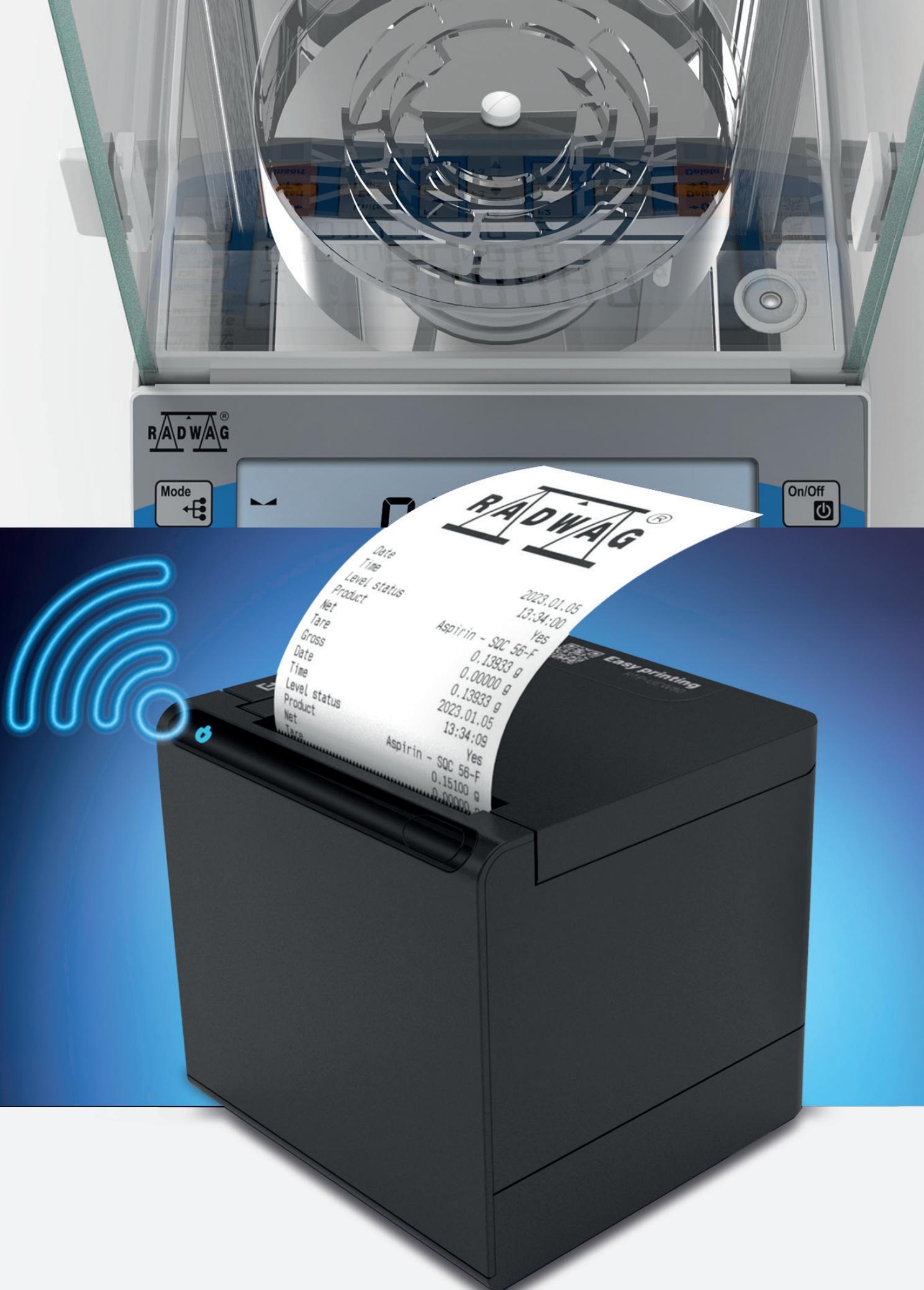
Adjustment	Internal
User	Operator 1
Project	123/SGW/2025
Date	14.02.2025
Time	14:10:47
Balance ID	4100

Signature	

A handwritten signature in black ink, appearing to read 'Jacek'.

Reports and printouts that can be freely configured

On the R2 series balances, the weighing reports are divided into three configurable sections. The layout of each section can be freely designed in terms of content.



Model	Product code	Maximum capacity [Max]	Readability [d]	Standard Repeatability [5% Max]	Stabilization time
ANALYTICAL BALANCES WITH INTERNAL CALIBRATION AS R2 PLUS					
AS 60/220.R2 PLUS	WL-104-1052	60/220 g	0.01/0.1 mg	0.012 mg	2 s
AS 62.R2 PLUS	WL-104-0179	62 g	0.01 mg	0.012 mg	2 s
AS 82/220.R2 PLUS	WL-104-1051	82/220 g	0.01/0.1 mg	0.012 mg	2 s
AS 110.R2 PLUS	WL-104-0175	110 g	0.1 mg	0.06 mg	2 s
AS 120.R2 PLUS	WL-104-0191	120 g	0.01 mg	0.012 mg	2 s
AS 160.R2 PLUS	WL-104-0176	160 g	0.1 mg	0.07 mg	2 s
AS 220.R2 PLUS	WL-104-0177	220 g	0.1 mg	0.07 mg	2 s
AS 310.R2 PLUS	WL-104-0178	310 g	0.1 mg	0.08 mg	2.5 s
AS 520.R2 PLUS	WL-104-0178	520 g	0.1 mg	0.08 mg	2.5 s
ANALYTICAL BALANCES WITH EXTERNAL CALIBRATION AS R1 PLUS					
AS 120.R1 PLUS	WL-104-0230	120 g	0.1 mg	0.06 mg	2 s
AS 220.R1 PLUS	WL-104-0229	220 g	0.1 mg	0.07 mg	2 s
PRECISION BALANCES WITH INTERNAL CALIBRATION PS R2					
PS 200/2000.R2	WL-212-1003	200/2000 g	1/10 mg	0.5/5 mg	2/1.5 s
PS 210.R2	WL-212-0018	210 g	1 mg	0.5 mg	2 s
PS 360.R2	WL-212-0019	360 g	1 mg	0.5 mg	2 s
PS 600.R2.1	WL-212-0071	600 g	10 mg	5 mg	1.5 s
PS 600.R2	WL-212-0020	600 g	1 mg	0.5 mg	2 s
PS 750.R2	WL-212-0021	750 g	1 mg	0.5 mg	2 s
PS 1000.R2	WL-212-0022	1000 g	1 mg	0.5 mg	2 s
PS 2100.R2.M	WL-212-0170	2100 g	10 mg	5 mg	1.5 s
PS 3500.R2.M	WL-212-0173	3500 g	10 mg	5 mg	1.5 s
PS 4500.R2.M	WL-212-0134	4500 g	10 mg	5 mg	1.5 s
PS 6100.R2.M	WL-212-0135	6100 g	10 mg	5 mg	1.5 s
PS 8100.R2.M	WL-212-0132	8100 g	10 mg	5 mg	1.5 s
PS 10100.R2.M	WL-212-0133	10100 g	10 mg	8 mg	1.5 s
PRECISION BALANCES WITH INTERNAL CALIBRATION AND HERMETIC INTERFACES PS R2.H					
PS 200/2000.R2.H	WL-221-1001	200/2000 g	1/10 mg	0.5/5 mg	2/1.5 s
PS 210.R2.H	WL-221-0001	210 g	1 mg	0.5 mg	2 s
PS 360.R2.H	WL-221-0002	360 g	1 mg	0.5 mg	2 s
PS 600.R2.H	WL-221-0003	600 g	1 mg	0.5 mg	2 s
PS 750.R2.H	WL-221-0004	750 g	1 mg	0.5 mg	2 s
PS 1000.R2.H	WL-221-0005	1000 g	1 mg	0.5 mg	2 s

Weighing pan dimensions	Adjustment	Display	Communication interfaces
ø90 mm, ø85 mm (option)	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø90 mm, ø85 mm (option)	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø90 mm, ø85 mm (option)	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø90 mm, ø85 mm (option)	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø90 mm, ø85 mm (option)	external	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
ø100 mm	external	LCD (backlit)	2xRS232, 2xUSB-A (interchangeable), USB-B, Wi-Fi® (option)
128x128 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
ø100 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)

Wi-Fi® is a registered trademark of Wi-Fi Alliance®.

Model	Product code	Maximum capacity [Max]	Readability [d]	Standard Repeatability [5% Max]	Stabilization time
PS 2100.R2.M.H	WL-221-0023	2100 g	10 mg	5 mg	1.5s
PS 3500.R2.M.H	WL-221-0024	3500 g	10 mg	5 mg	1.5s
PS 4500.R2.M.H	WL-221-0025	4500 g	10 mg	5 mg	1.5s
PS 6100.R2.M.H	WL-221-0026	6100 g	10 mg	5 mg	1.5s

PRECISION BALANCES WITH EXTERNAL CALIBRATION PS R1

PS 200/2000.R1	WL-213-1002	200/2000 g	1/10 mg	0.5/5 mg	2/1.5s
PS 360.R1	WL-213-0020	360 g	1 mg	0.5 mg	2 s
PS 600.R1	WL-213-0080	600 g	1 mg	0.5 mg	2 s
PS 750.R1	WL-213-0022	750 g	1 mg	0.5 mg	2 s
PS 1000.R1	WL-213-0023	1000 g	1 mg	0.5 mg	2 s
PS 3500.R1.M	WL-213-0091	3500 g	10 mg	5 mg	1.5s
PS 4500.R1.M	WL-213-0078	4500 g	10 mg	5 mg	1.5s
PS 6100.R1.M	WL-213-0085	6100 g	10 mg	5 mg	1.5s

Model	Product code	Maximum capacity [Max]	Readability [d]	Moisture content readability	Drying temperature
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MOISTURE ANALYZERS WITH EXTERNAL CALIBRATION MA R

MA 50/1.R	WL-305-0002	50 g	0.1 mg	0.0001 %	Max 160 °C
MA 50/1.R.NS	WL-305-0039	50 g	0.1 mg	0.0001 %	Max 160 °C
MA 50/1.R.WH	WL-305-0006	50 g	0.1 mg	0.0001 %	Max 250 °C
MA 50.R	WL-205-0001	50 g	1 mg	0.001 %	Max 160 °C
MA 50.R.NS	WL-305-0014	50 g	1 mg	0.001 %	Max 160 °C
MA 50.R.WH	WL-205-0005	50 g	1 mg	0.001 %	Max 250 °C
MA 110.R	WL-305-0004	110 g	1 mg	0.001 %	Max 160 °C
MA 110.R.NS	WL-305-0024	110 g	1 mg	0.001 %	Max 160 °C
MA 110.R.WH	WL-305-0007	110 g	1 mg	0.001 %	Max 250 °C
MA 210.R	WL-305-0003	210 g	1 mg	0.001 %	Max 160 °C
MA 210.R.NS	WL-305-0009	210 g	1 mg	0.001 %	Max 160 °C
MA 210.R.WH	WL-305-0008	210 g	1 mg	0.001 %	Max 250 °C

Weighing pan dimensions	Adjustment	Display	Communication interfaces
195x195 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	internal (automatic)	LCD (backlit)	hermetic: 2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
128x128 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)
195x195 mm	external	LCD (backlit)	2xRS232, USB-A, USB-B, Wi-Fi® (option)

Heating module	Weighing pan dimensions	Adjustment	Display	Communication interfaces
IR emitter	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
metal heater	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
halogen	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
IR emitter	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
metal heater	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
halogen	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
IR emitter	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
metal heater	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
halogen	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
IR emitter	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
metal heater	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®
halogen	ø90 mm, h= 8 mm	external	LCD (backlit)	RS232, USB-A, USB-B, Wi-Fi®

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