RADWAG®

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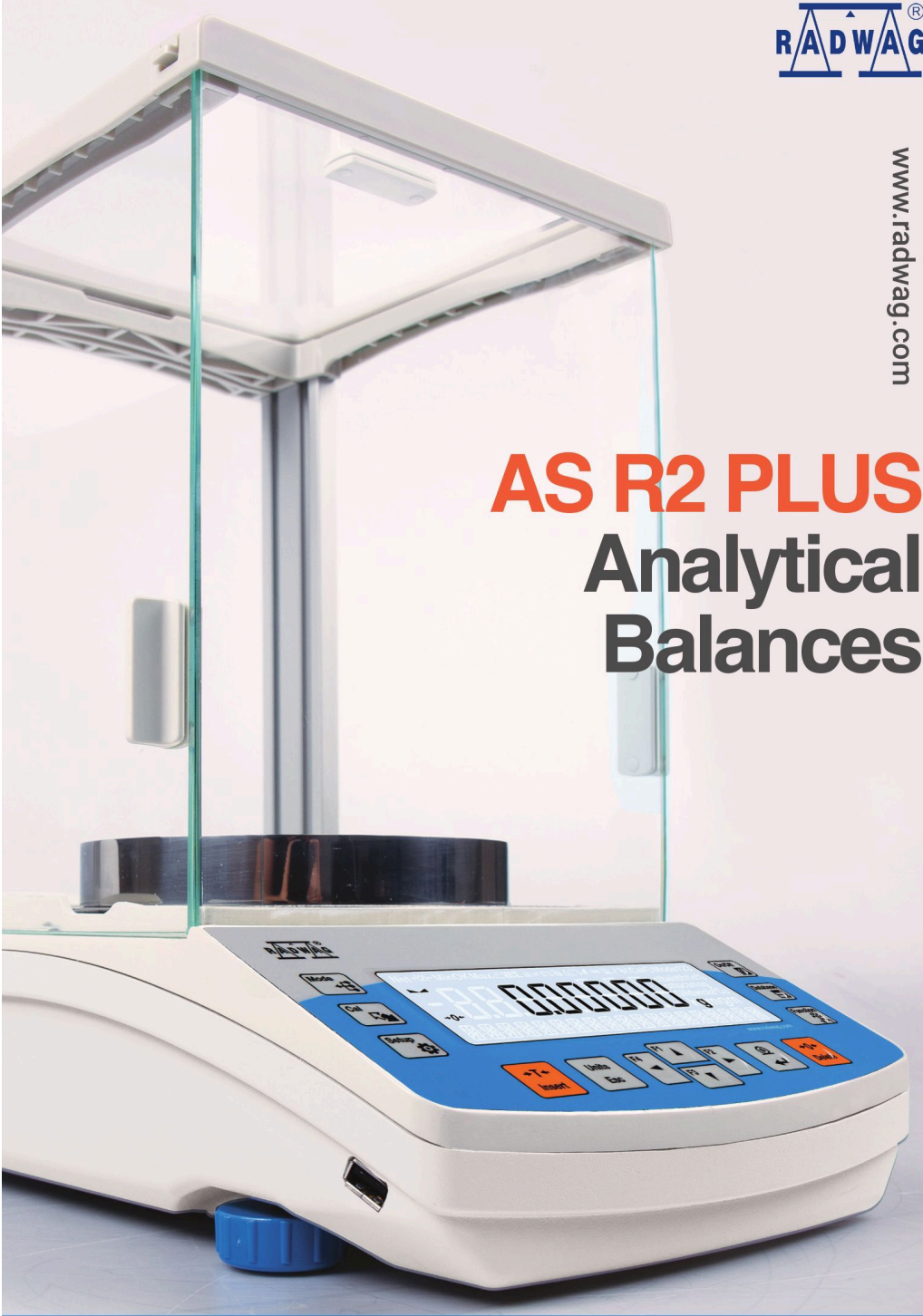
AS R2 PLUS
Analytical Balances



The innovative AS R2 PLUS analytical balances guarantee precision and readability along with resistance to variable ambient conditions. New ergonomic solution ensures convenient operation.

Increased Durability and Reliability
of long-term operation due to innovative construction solutions.

Enlarged Weighing Chamber
and open-door clearance allow easy access to the weighing pan and facilitates use of laboratory glassware of various sizes and dimensions.

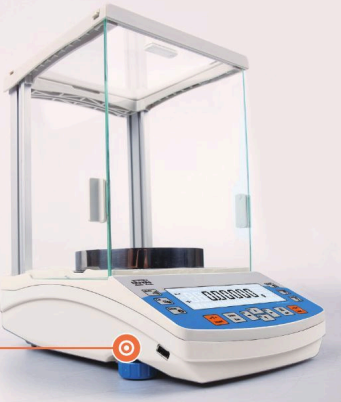
Ensured Accuracy of Indications
in extremely challenging conditions due to modernization of internal adjustment system.

Open-Work Weighing Pan
In order to guarantee readability of d=0.01 mg it is recommended to use the open-work weighing pan ensuring obtaining standard value of USP minimum weight.

Balance Levelling System
Clearly visible levelling device located in the front of the weighing chamber.

Ease of Communication
with peripherals due to placing of the USB interface at the chamber front.

Improved Aluminium Base
ensuring stability of the weighing system



Communication Interfaces

The functionalities of AS R2 PLUS balances can be expanded using the following communication interfaces: USB-A, USB-B, RS 232, Wi-Fi®. The USB port located on the front of the balance enables easy and fast communication with the USB flash drive and connecting additional devices.

- Parts counting
- Percent weighing
- Density determination
- GLP procedures
- Ambient conditions measurement
- Dosing
- Statistics
- Under-pan weighing
- Peak hold
- Replaceable unit
- Checkweighing
- Animal weighing
- Autotest
- Multilingual menu

Data Protection

Access to valuable information is possible after logging. The administrator manages the data access congifuration.

ALIBI Memory

Data safety is ensured by the ALIBI memory integrated into AS R2 PLUS balances, which enables record of up to 100 000 weighings. ALIBI guarantees continuity of data collection over a long period of time.

Wi-Fi®

Remote balance control via devices with Android, iOs or Windows10 operating systems

Pictograms and Units
- Intuitive pictograms signal working mode, selected function, connection with computer, ,etc.
- Extended number of displayed units supports the weighing process.

Bar Graph
Graphic visualization of mass measurement changes in real time

Dedicated Status Bar
Display of additional messages, e.g. product name, tare value.

Quick Information Access
Direct access to functions and databases via key set located on the balance panel. The function keys F1 to F4 can be assigned to suit the needs of the user.

AS R2 PLUS
Technical Specification

	AS 60/220.R2	AS 62.R2	AS 82/220.R2	AS 120.R2	AS 110.R2	AS 160.R2	AS 220.R2	AS 310.R2	AS 520.R2
Maximum capacity [Max]	60 g / 220 g	62 g	82 g / 220 g	120 g	110 g	160 g	220 g	310 g	520 g
Readability [d]	0.01 mg / 0.1 mg	0.01 mg	0.01 mg / 0.1 mg	0.01 mg	0.1 mg	0.1 mg	0.1 mg	0.1 mg	0.1 mg
Typical Values: Max repeatability (5% Max)*	0.015 mg	0.012 mg	0.015 mg	0.015 mg	0.06 mg	0.07 mg	0.07 mg	0.08 mg	0.08 mg
Typical Values: Max repeatability	0.08 mg	0.02 mg	0.08 mg	0.04 mg	0.08 mg	0.08 mg	0.08 mg	0.12 mg	0.25 mg
Typical Values: Minimum weight USP	20 mg	24 mg	30 mg	30 mg	120 mg	140 mg	140 mg	160 mg	160 mg
Typical Values: Minimum weight	3 mg	2.4 mg	3 mg	3 mg	12 mg	14 mg	14 mg	16 mg	16 mg
Permissible values: Max repeatability (5% Max)*	0.02 mg	0.018 mg	0.02 mg	0.02 mg	0.09 mg	0.09 mg	0.09 mg	0.12 mg	0.12 mg
Permissible values: Max repeatability	0.1 mg	0.03 mg	0.1 mg	0.05 mg	0.1 mg	0.1 mg	0.1 mg	0.15 mg	0.4 mg
Linearity	±0.05 mg / ±0.2 mg	±0.05 mg	±0.05 mg / ±0.2 mg	±0.07 mg	±0.2 mg	±0.2 mg	±0.2 mg	±0.3 mg	±0.4 mg
Stabilization time	2 s	2 s	2 s	2 s	2 s	2 s	2 s	2.5 s	2.5 s
Adjustment	Internal	Internal	Internal	Internal	Internal	Internal	Internal	Internal	Internal
Weighing pan dimensions	ø 90 mm**	ø 90 mm**	ø 90 mm**	ø 90 mm**	ø 100 mm	ø 100 mm	ø 100 mm	ø 100 mm	ø 100 mm
Display	LCD (backlit)								
Communication interfaces	USB-A, USB-B, 2×RS 232, Wi-Fi® (option)								

*Repeatability is expressed as a standard deviation from 10 weighing cycles. | **ø 85 mm standard weighing pan on purchase order | Wi-Fi® is a registered trademark owned by Wi-Fi Alliance organization.

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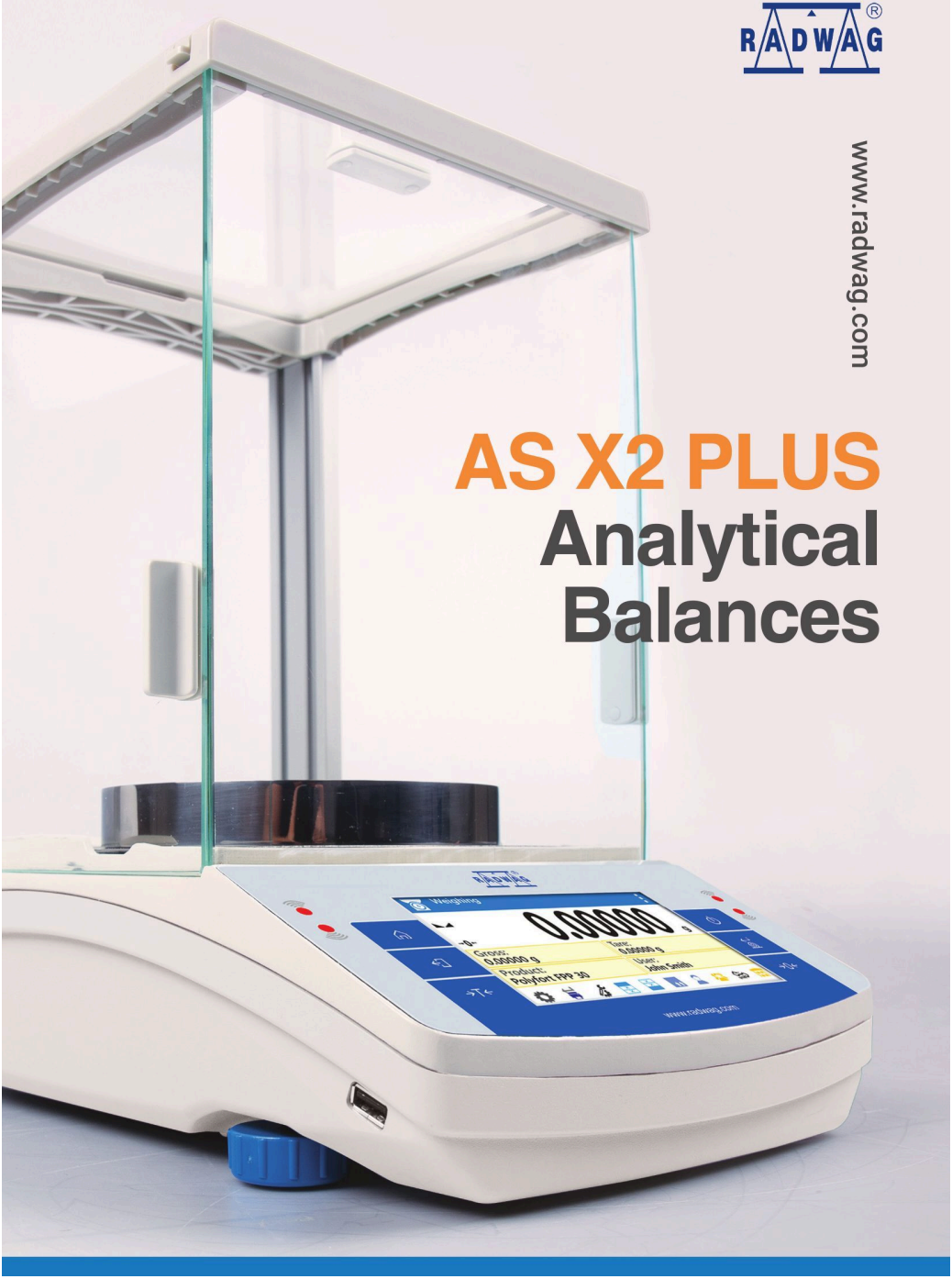
AS X2 PLUS
Analytical Balances



The innovative AS X2 PLUS analytical balances guarantee the highest precision and readability along with resistance to variable ambient conditions. New ergonomic solution ensures convenient operation.

Increased Durability and Reliability of long-term operation due to innovative construction solutions.

Enlarged Weighing Chamber and open-door clearance allow easy access to the weighing pan and facilitate use of laboratory glassware of various sizes and dimensions.

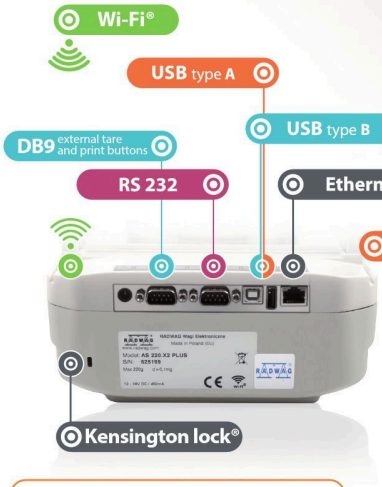
Ensured Accuracy of Indications in extremely challenging conditions due to modernization of internal adjustment system.

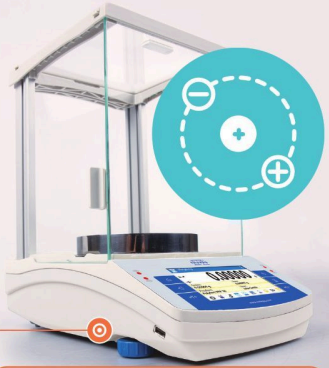
Open-Work Weighing Pan
In order to guarantee readability of d=0.01 mg it is recommended to use the open-work weighing pan ensuring obtaining standard value of USP minimum weight.

LevelSENSING SYSTEM
The sensors measure tilt and display graphic message on the weighing device screen. Levelling system facilitates adjustment, controls the level state, and informs about level deviations, all this in accordance with GLP and GMP standards.

Ease of Communication with peripherals due to placing of the USB interface at the balance front.

Improved **aluminium** base ensuring stability of the weighing system.





Antistatic Weighing Chamber

- compensation of electrostatic charges thanks to specially-designed antistatic glass coating
- elimination of the influence of electrostatics onto the weighing result

Antistatic coating applied in balances with readability d=0.01 will be available in IV quarter of 2020.

Communication Interfaces

The functionalities of AS X2 PLUS balances can be expanded using the following communication interfaces: USB-A, USB-B, RS 232, DB9, Ethernet, Wi-Fi®.The USB port located on the front of the balance enables easy and fast communication with the USB flash drive and connecting additional devices.

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SMART$_{LAB}$ by RADWAG – support and supervision over an ongoing mass measurement in the laboratory

Automatic Adjustment

Automatic internal adjustment system guarantees 100% efficiency in eliminating balance sensitivity deviations regardless of external ambient conditions.

Data Control

Accessing information in the balance depends on the user's permission level. The administrator can manage three different permission levels.

Sensors

Touch-free operation and programmable sensors facilitate daily work and reduce the quantity of actions performed during the weighing procedure.

Automatic Weighing Records

Reports on processes and partial weighings can be generated and sent for archiving via the USB to external devices.

ALIBI Memory

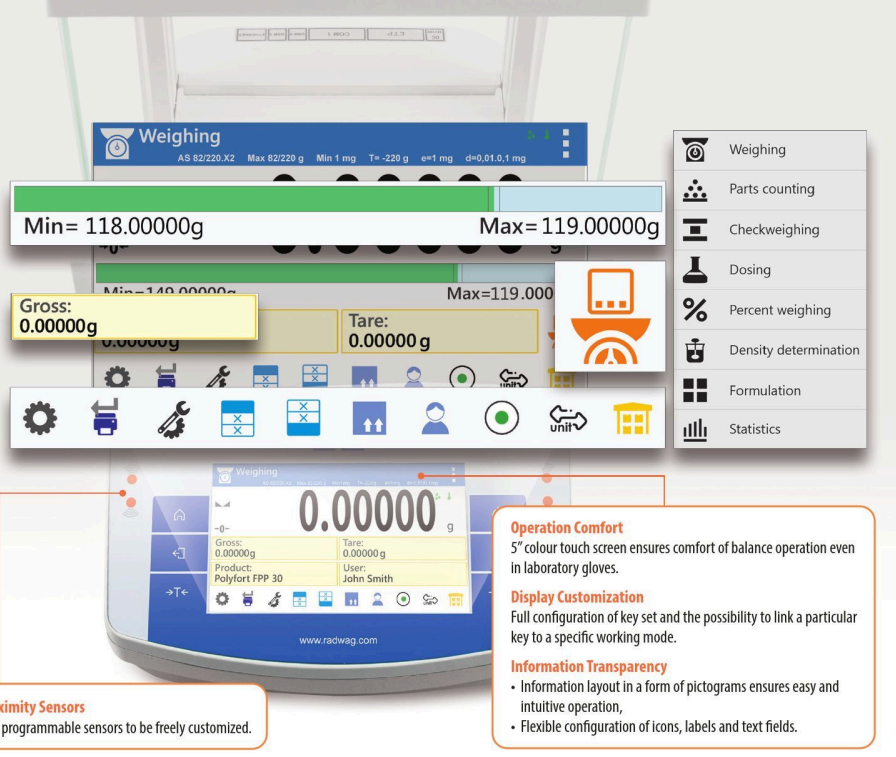
Data safety is ensured by the ALIBI memory integrated into AS X2 PLUS balances, which enables record of up to 500 000 weighings. ALIBI guarantees continuity of data collection over a long period of time.

Ambient Conditions Monitoring

Cooperation with THB RADWAG production, which enables monitoring of ambient conditions such as temperature and humidity.

Wi-Fi®

Remote balance control via devices with Android, iOs or Windows10 operating systems.



Proximity Sensors
Two programmable sensors to be freely customized.

Operation Comfort
5" colour touch screen ensures comfort of balance operation even in laboratory gloves.

Display Customization
Full configuration of key set and the possibility to link a particular key to a specific working mode.

Information Transparency
- Information layout in a form of pictograms ensures easy and intuitive operation,
- Flexible configuration of icons, labels and text fields.

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Display	5" colour touchscreen								
Communication interfaces	USB-A, USB-B, RS 232, Ethernet, DB9 external tare print buttons, Wi-Fi®								

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