RADWAG BALANCES AND SCALES
ADVANCED WEIGHING TECHNOLOGIES

Compliance with GLP and GMP requirements
Resistance to variable ambient conditions
Ergonomic solutions increasing operation comfort
Perfect for laboratory applications


SYNERGY
LAB

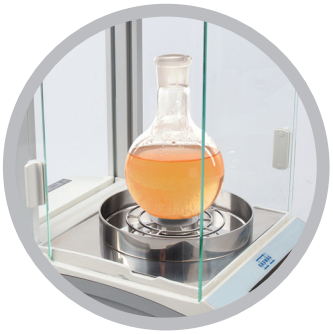
# AS X2 PLUS
# Analytical Balance

ABSOLUTE PRECISION AND ACCURACY
OF ADVANCED-CLASS INSTRUMENTS

www.radwag.com

# 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.

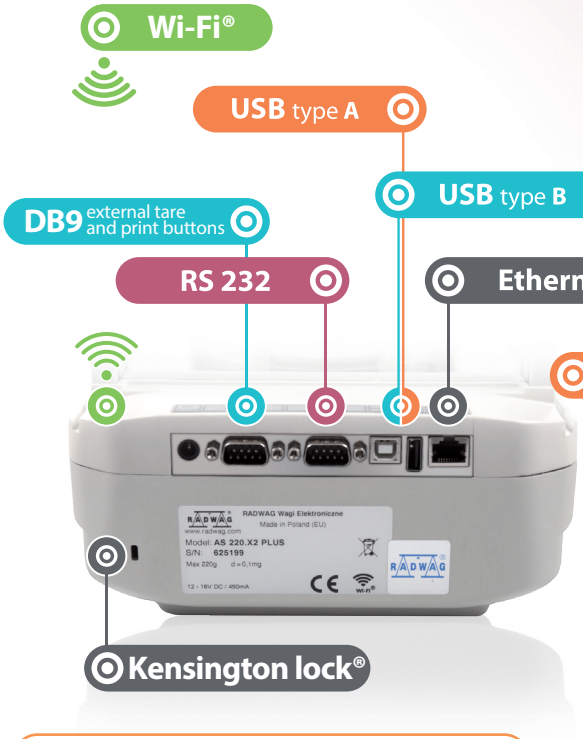
**Ensured Accuracy of Indications** in extremely challenging conditions due to modernization of internal adjustment system.

**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

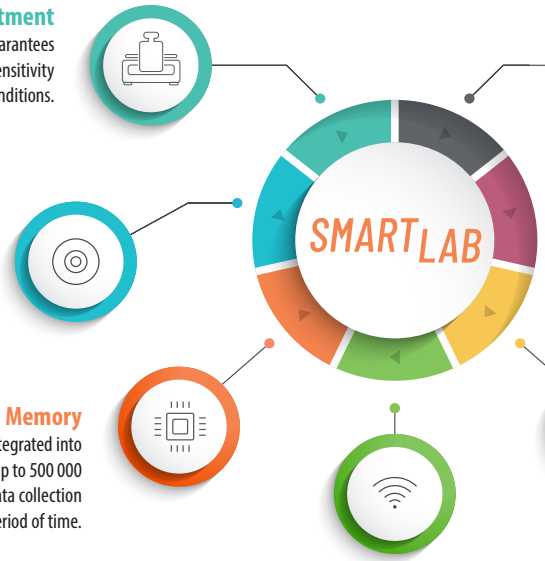
Antistatic coating applied in balances with readability d=0.01 will be available in IV quarter of 2020.

### 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.

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

## 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

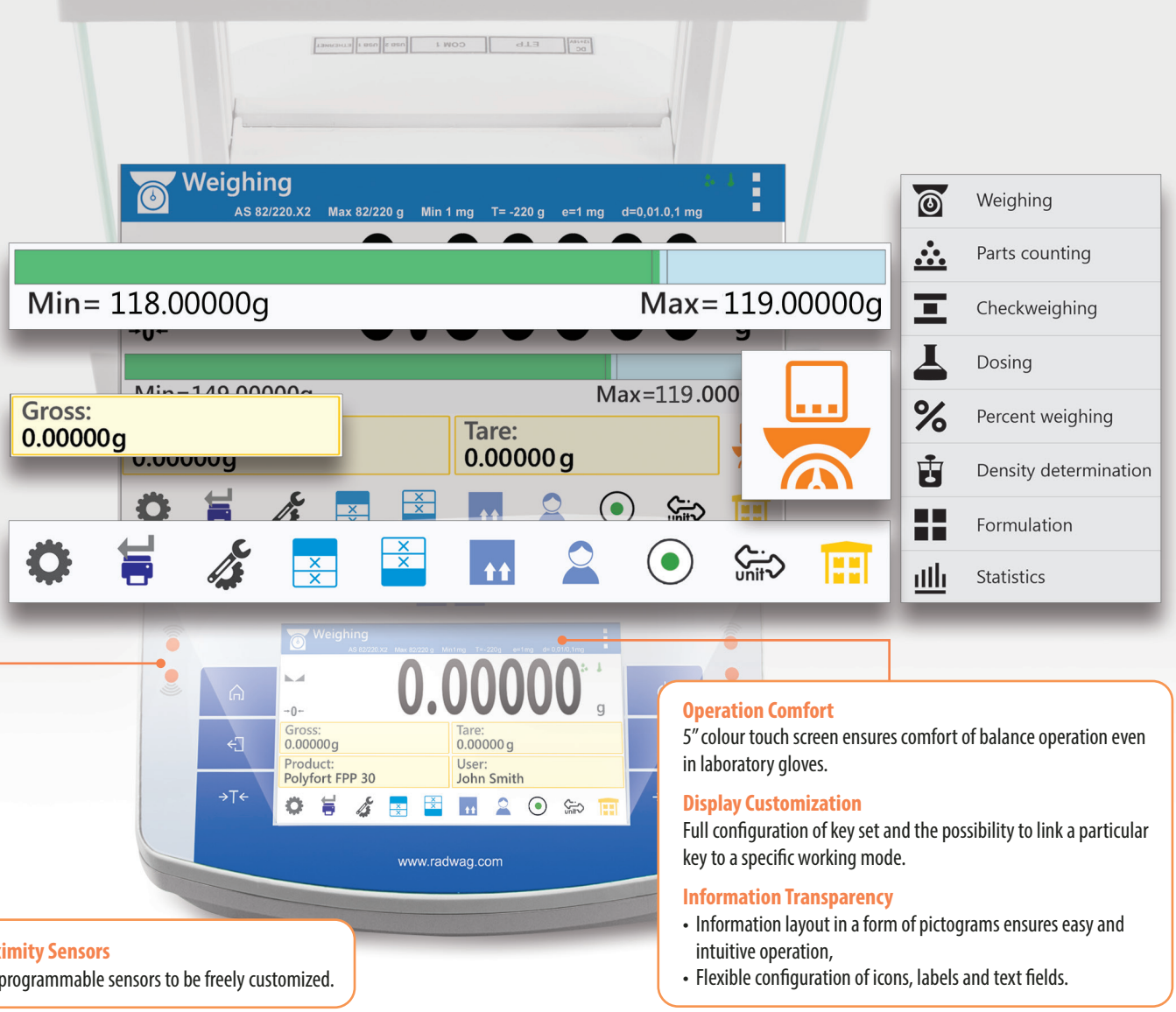
Data safety is ensured by the ALIBI memory integrated into AS X2 PLUS balances, which enables record of up to 500 000 weighings. ALIBI guarantees continuity of data collection over a long period of time.

### 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.

## AS X2 PLUS
## Technical Specification

| | AS 60/220.X2 | AS 62.X2 | AS 82/220.X2 | AS 120.X2 NEW | AS 110.X2 | AS 160.X2 | AS 220.X2 | AS 310.X2 | AS 520.X2 NEW |
|---|---|---|---|---|---|---|---|---|---|
| **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** | 30 mg | 24 mg | 30 mg | 30 mg | 120 mg | 140 mg | 140 mg | 160 mg | 160 mg |
| Typical Values **Minimum weight** | 3.0 mg | 2.4 mg | 3.0 mg | 3.0 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** | 5" colour touchscreen | | | | | | | | |
| **Communication interfaces** | USB-A, USB-B, RS 232, Ethernet, DB9 external tare print buttons, Wi-Fi® | | | | | | | | |

*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.