



X2 Series Laboratory Balances



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The X2 series is a synergy between solutions typical for advanced class balances and technology intended mainly for professional devices.

The combination of the above qualities provides you with a high-tech instrument offering the utmost accuracy and maximum comfort of operation for a price typical of lower class devices.

- 5" color capacitive touchscreen
- Display customization via widgets
- Multilingual, interactive menu
- Sensors for touch-free operation
- Conformity with GLP and GMP regulations
- Dynamically controlled sample weight (bar graph)
- Statistics, formulations, reports and printouts
- Unlimited communication possibilities
- Alibi Memory with record of measurements
- Complex databases
- Maximum comfort of operation
- Internal adjustment (excluding MA X2.A)

Home screen

- A** Set working mode and profile
- B** Logged-in user info
- C** Date, time, connection, battery state etc.
- D** Weighing result window
- E** Load bar graph
- F** Checkweighing bar graph (thresholds)
- G** Ambient conditions pictograms
- H** Configurable additional information field
- I** Quick access buttons (editing option)
- J** Proximity sensors (operation optimization)
- K** Setting menu for current operating mode
- L** Proximity sensors





AS X2 PLUS Analytical balances

Maximum capacity [Max]: up to 520 g
 Readability [d]: down to 0.01 mg
 Weighing pan dimensions: ø 90 mm, ø 100 mm, ø 85 mm (option)



PS X2 Precision balances

Maximum capacity [Max]: up to 10.1 kg
 Readability [d]: down to 1 mg
 Weighing pan dimensions: 128 x 128 mm, 195 x 195 mm



WLC X2 Precision balances

Maximum capacity [Max]: up to 21 kg
 Readability [d]: down to 1 mg
 Weighing pan dimensions: 128 x 128 mm, 195 x 195 mm, ø100 mm



MA X2.A, MA X2.IC.A Moisture analyzers

Maximum capacity [Max]: up to 210 g
 Readability [d]: down to 0.1 mg
 Weighing pan dimensions: ø 90 mm, h = 8 mm

The X2 Series as a Standard for Quality

Accuracy in any temperature

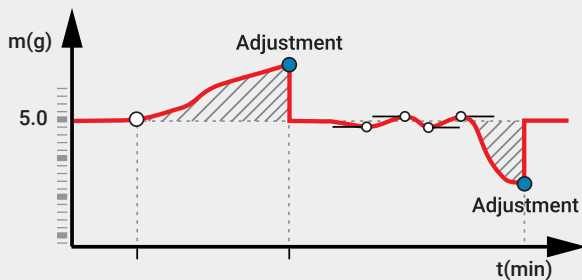
Accuracy is one of the most significant parameters influencing metrological characteristics of the weighing device. Production and control of X2 balances include monitoring and adjustment of accuracy in changeable temperatures. With minimized indication deviation, the X2 series ensures great measurement stability for a wide temperature range.

Accuracy in any conditions

The multi-shield mechanical design of X2 series balances offers effective protection against the influence of ambient conditions. With such design, the X2 series ensures fast and reliable measurement of both light and heavy loads, even when ambient conditions pose challenge.

Accuracy of each weighing indication

X2 series balances with an automatic adjustment system, using an internal adjustment weight, guarantee reliable measurement. Regardless of ambient conditions, the system provides effective elimination of any balance sensitivity deviations.



Quality begins with precision

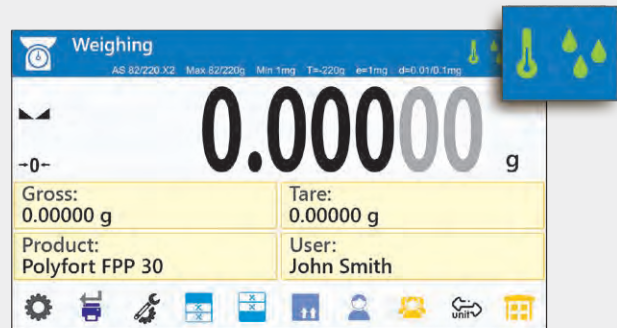
The optimization of X2 structural components provides measurement repeatability – the pivotal parameter for several analytical processes.

Speed, operation time optimization

The X2 series is a product of both measuring system development and progress when it comes to the methodology of measuring signal monitoring. X2 balances offer a wide range of settings. This provides the right sensitivity for measurements performed within a very short time.

Ambient conditions monitoring

Information on change in ambient conditions is essential in measuring devices of high resolution. For your comfort, X2 series balances have been equipped with system that signals the dynamics of temperature changes with a special symbol. This is especially useful while installing your device (acclimatization period), and when the



Databases - weighing process ergonomics

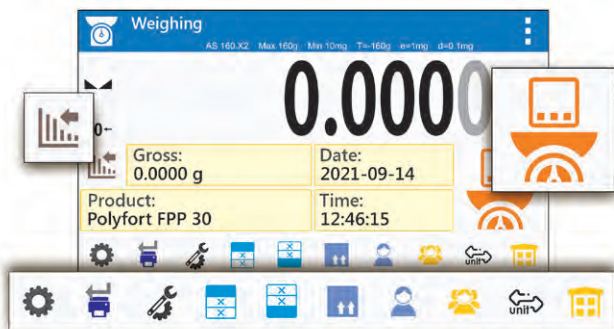
The structure of X2 series balances is based on structural databases. Freely programmed database content favours the creation of a dedicated information network, suiting precisely the nature of any performed process. Databases comprise the following components:

- 100 users
- 100 packaging types
- 100 warehouses
- 100 formulations
- 200 formulation reports
- 500 density reports
- 1 000 customers
- 5 000 products
- 50 000 weighings
- 500 000 Alibi records

Redefined Functionality

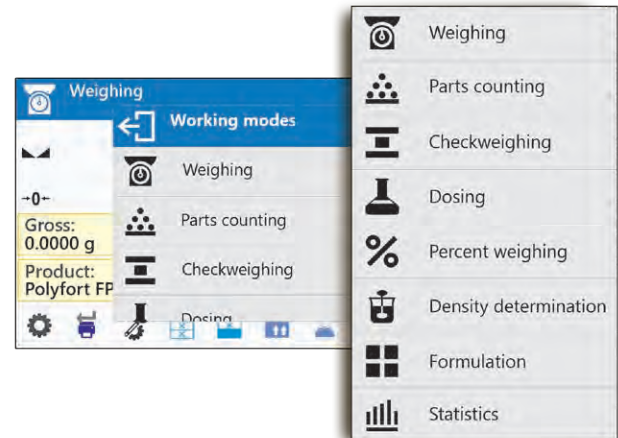
Button customization

Customized buttons facilitate the selection of weighing units, packaging, customers, and variable tare values adding to the fast and solid performance of the weighing process. User-designed key, tailored to the user's needs, can be assigned to a particular working mode, boosting your balance's functionality.



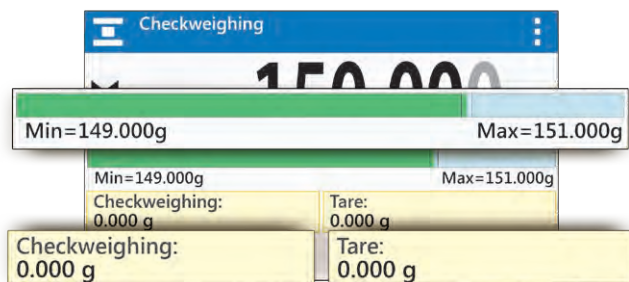
Clear information arrangement, even greater ease of operation

Priority for our X2 series balances is ease of operation and intuitive communication with the user. Clear information presented by symbols provides even more user-friendly operation.



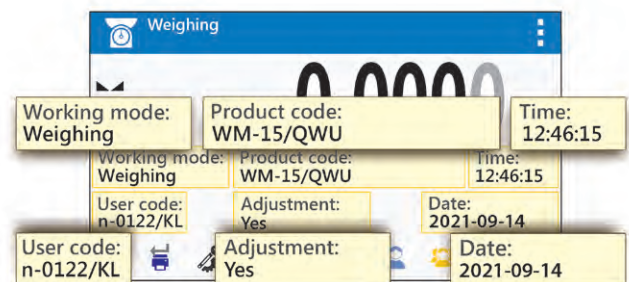
Labels selcted freely by a user

X2 balances feature labels – pre-defined information fields providing various data, e.g. product name, user, date and time or bar graph. Labels names and values are not intended for modification but it is the user who decides which labels are to be displayed.



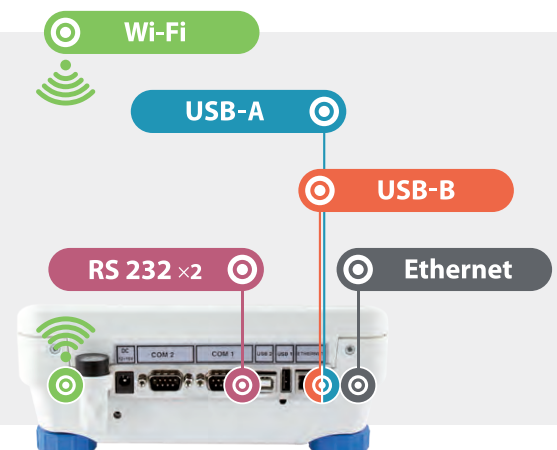
Configurable text fields

Text fields and labels feature similar characteristics, but text fields, unlike labels, can be freely created and configured by a user. It is possible to provide each text field with an individual name, function and value. In addition, you can decide on the particular text field size and location.



Communication interfaces

The X2 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 Wi-Fi technology. The latter is supported by all RADWAG-manufactured programs.



21 CFR Part 11

EU GMP Annex 11

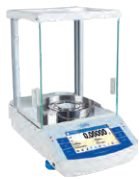


- Password strength settings
- Maximum number of incorrect login attempts
- Auto-logout of inactive user
- Permissions for non-logged-in users
- Permissions for electronic signature
- Permissions for databases management
- Creating database backup
- Adding respectively secured users
- Adding and editing 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.**

Technical Specification

Analytical Balance



| Product Code | Model | Max. capacity | Readability | Repeatability | Weighing pan dimensions |
|--------------|--------------------------|---------------|---------------|---------------|--------------------------|
| WL-104-0183 | AS 62.X2 PLUS | 62 g | 0.01 mg | 0.01 mg | ø90 mm & ø85 mm (option) |
| WL-104-0190 | AS 120.X2 PLUS | 120 g | 0.01 mg | 0.01 mg | ø90 mm & ø85 mm (option) |
| WL-104-1053 | AS 60/220.X2 PLUS | 60 / 220 g | 0.01 / 0.1 mg | 0.01 mg | ø90 mm & ø85 mm (option) |
| WL-104-1050 | AS 82/220.X2 PLUS | 82 / 220 g | 0.01 / 0.1 mg | 0.01 mg | ø90 mm & ø85 mm (option) |



| Product Code | Model | Max. capacity | Readability | Repeatability | Weighing pan dimensions |
|--------------|-----------------------|---------------|-------------|---------------|-------------------------|
| WL-104-0181 | AS 160.X2 PLUS | 160 g | 0.1 mg | 0.06 mg | ø100 mm |
| WL-104-0169 | AS 220.X2 PLUS | 220 g | 0.1 mg | 0.06 mg | ø100 mm |
| WL-104-0182 | AS 310.X2 PLUS | 310 g | 0.1 mg | 0.07 mg | ø100 mm |
| WL-104-0184 | AS 520.X2 PLUS | 520 g | 0.1 mg | 0.07 mg | ø100 mm |

Precision Balance



| Product Code | Model | Max. capacity | Readability | Repeatability | Weighing pan dimensions |
|--------------|-----------------------|---------------|----------------|------------------|-------------------------|
| WL-218-0015 | PS 210.X2 | 210 g | 0.001 g | 0.0005 g | 128x128 mm |
| WL-218-0020 | PS 360.X2 | 360 g | 0.001 g | 0.0005 g | 128x128 mm |
| WL-218-0022 | PS 600.X2 | 600 g | 0.001 g | 0.0005 g | 128x128 mm |
| WL-218-0024 | PS 750.X2 | 750 g | 0.001 g | 0.0005 g | 128x128 mm |
| WL-218-0026 | PS 1000.X2 | 1000 g | 0.001 g | 0.0005 g | 128x128 mm |
| WL-218-1002 | PS 200/2000.X2 | 200 / 2000 g | 0.001 / 0.01 g | 0.0005 / 0.005 g | 128x128 mm |
| WL-218-0088 | PS 3000.X2 | 3000 g | 0.001 g | 0.0005 g | 128x128 mm |



| Product Code | Model | Max. capacity | Readability | Repeatability | Weighing pan dimensions |
|--------------|----------------------|---------------|-------------|---------------|-------------------------|
| WL-218-0127 | PS 2100.X2.M | 2100 g | 0.01 g | 0.005 g | 195x195 mm |
| WL-218-0134 | PS 3500.X2.M | 3500 g | 0.01 g | 0.005 g | 195x195 mm |
| WL-218-0103 | PS 4500.X2.M | 4500 g | 0.01 g | 0.005 g | 195x195 mm |
| WL-218-0104 | PS 6100.X2.M | 6100 g | 0.01 g | 0.005 g | 195x195 mm |
| WL-218-0102 | PS 8100.X2.M | 8100 g | 0.01 g | 0.005 g | 195x195 mm |
| WL-218-0101 | PS 10100.X2.M | 10100 g | 0.01 g | 0.005 g | 195x195 mm |



| Product Code | Model | Max. capacity | Readability | Repeatability | Weighing pan dimensions |
|--------------|-------------------|---------------|-------------|---------------|-------------------------|
| WL-222-0001 | WLC 0.2.X2 | 0.2 kg | 0.001 g | 0.0014 g | ø100 mm |



| Product Code | Model | Max. capacity | Readability | Repeatability | Weighing pan dimensions |
|--------------|-------------------|---------------|-------------|---------------|-------------------------|
| WL-222-0002 | WLC 0.6.X2 | 0.6 kg | 0.01 g | 0.008 g | 128x128 mm |



| Product Code | Model | Max. capacity | Readability | Repeatability | Weighing pan dimensions |
|--------------|--------------------|---------------|--------------|----------------|-------------------------|
| WL-222-0003 | WLC 2.X2 | 2 kg | 0.01 g | 0.015 g | 195x195 mm |
| WL-222-0004 | WLC 6.X2 | 6 kg | 0.1 g | 0.1 g | 195x195 mm |
| WL-222-1001 | WLC 1/10.X2 | 10 kg | 0.01 / 0.1 g | 0.015 / 0.08 g | 195x195 mm |
| WL-222-0009 | WLC 10.X2 | 10 kg | 0.1 g | 0.08 g | 195x195 mm |
| WL-222-0011 | WLC 20.X2 | 20 kg | 0.1 g | 0.1 g | 195x195 mm |
| WL-222-0013 | WLC 21.X2 | 21 kg | 1 g | 0.8 g | 195x195 mm |

Technical Specification for X2 Series Moisture Analyzers can be found in the Laboratory Balances section, under Moisture Analyzers.