



**RADWAG BALANCES AND SCALES**  
ADVANCED WEIGHING TECHNOLOGIES



# X2 Series Balances

Innovative Functional Solutions

## X2 Synergy

The X2 series embodies the synergy between conventional solutions characteristic of high quality balances, and technology intended mainly for professional standards.

The combination provides you with a high-tech instrument offering pinpoint accuracy and maximum ease of operation at a price typical of lesser devices.

- 5" color capacitive touchscreen
- Display customization with 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

## Home screen

- A** Home screen button
- B** Exit (returning to the previous screen) button
- C** Taring button
- D** On/Off button
- E** Enter/Print button
- F** Zeroing button
- G** Status bar (working mode, metrologically important parameters)
- H** Measurement indication area
- I** Information desktop
- J** Quick access toolbar for the direct operation of balance functions and settings
- K** Current working mode setup
- L** Sensors for touch-free operation



# X2 SYNERGY



AS.X2 analytical balances

Max: up to 310 g  
 d: from 0,01 mg  
 Weighing pan: ø90, ø100 mm



PS.X2 precision balances

Max: up to 1000 g  
 d: from 1 mg  
 Weighing pan: 128 × 128 mm



PS.X2 precision balances

Max: up to 10000 g  
 d: from 10 mg  
 Weighing pan: 195 × 195 mm



APP.X2 precision balances

Max: up to 35 kg  
 d: from 0,01 g  
 Weighing pan: 348 × 260 mm

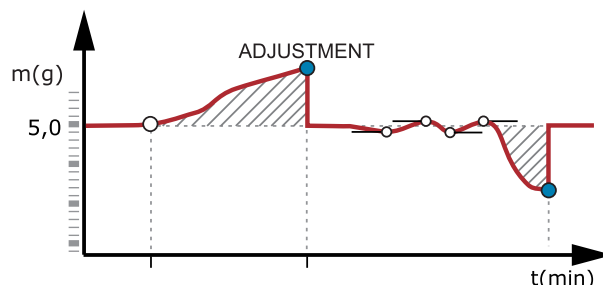
ENERGY

# The X2 series as a standard for quality



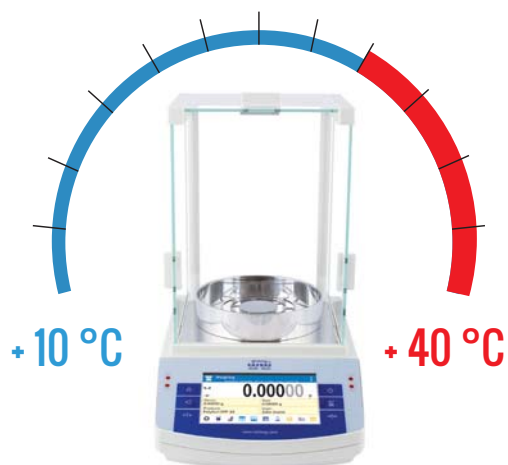
## Accuracy of each weighing indication

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.



## Accuracy for any temperature

Accuracy is one of the most significant parameters influencing metrological characteristics of the weighing device. The production and control system designed for X2 balances monitors and adjusts for accuracy in changing temperatures. With minimized deviation of results, the X2 series ensures great measurement stability for wide temperature range.



## Accuracy for 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 stands for the fast and reliable measurement of either light or heavy loads, even when ambient conditions pose challenges.



## Quality begins with precision



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

## Speed operation time optimization



The X2 series is a product of both, measuring systems development, and progress when it comes to measuring signals monitoring methodology. With our X2 series balances, you are offered solutions that guarantee a full range of settings providing the right sensitivity for measurements performed within seconds.

## Ambient conditions monitoring

Information on fluctuating ambient conditions is essential in measuring devices characterized by 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 working environment shows its changeable nature.

**Weighing**  
AS 82/220.X2 Max 82/220g Min 1mg T~-220g e=1mg d=0.01/0.1mg

0.00000 g

-0-

Gross: 0.00000 g	Tare: 0.00000 g
Product: Polyfort FPP 30	User: John Smith

Icons: Gear, Printer, Mouse, Windows, Windows, Home, User, Alarm, Home, Grid

Temperature monitoring icon: A blue square with a thermometer and two water droplets.



# Redefined functionality

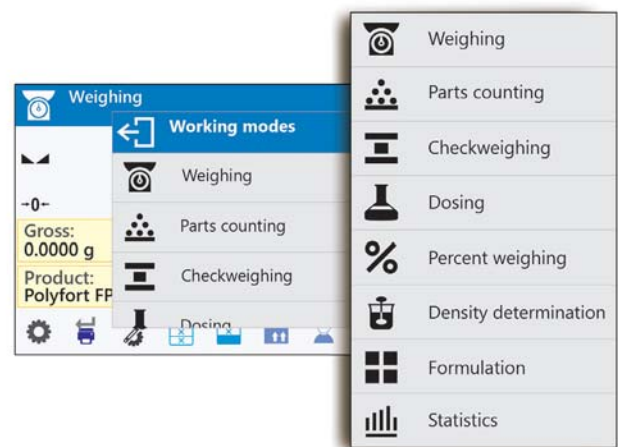
## Buttons customization

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.



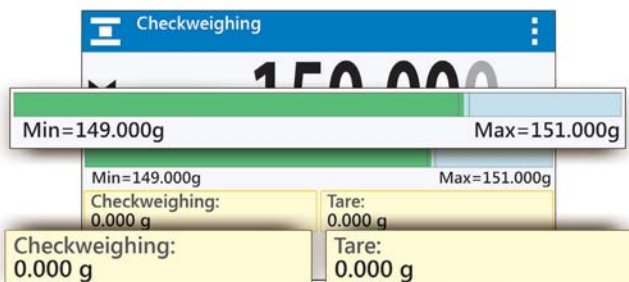
## Clear information arrangement even greater ease of operation

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.



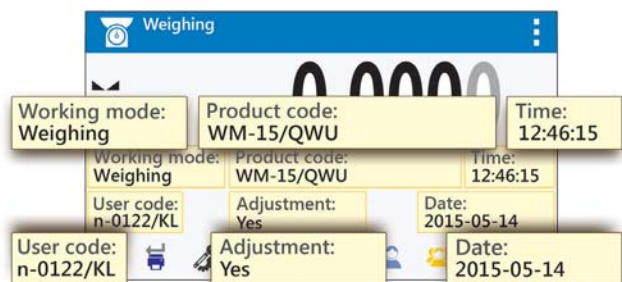
## Labels design your own onscreen labels

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.



## Text fields adapt the text field to your own needs

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.



## Databases ergonomics for your weighing process

The IT structure of X2 series balances is based on structural databases. Freely programmed database content favours the creation of a dedicated information network, wherein the network precisely suits the nature of any performed process.

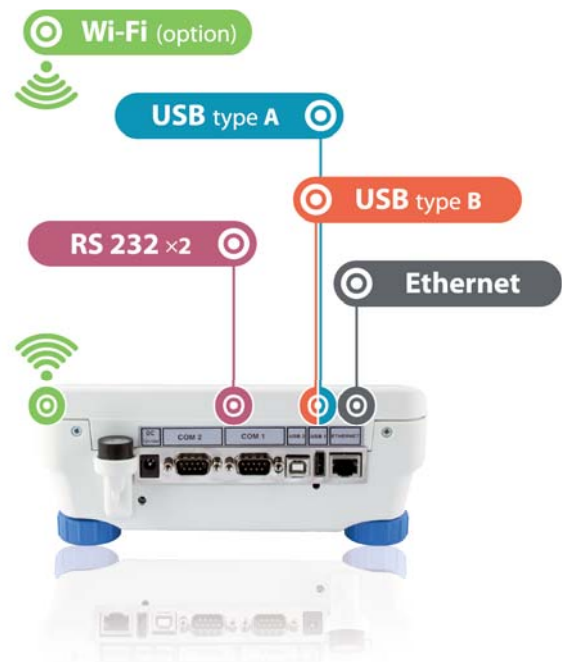


Databases comprise the following components:

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

## Communication interfaces

With various means of communication, the possibilities of X2 series balances are even more enhanced when it comes to information storage. Standard cable connections are realized via USB-A and USB-B or RS 232 ports. As for wireless connection, Wi-Fi networking technology is used by any RADWAG-manufactured software.



# Data safety and monitoring

## Protecting data user authorization levels

Three different authorization levels provide restricted access to confidential information for particular groups of users. An administrator manages authorization levels.



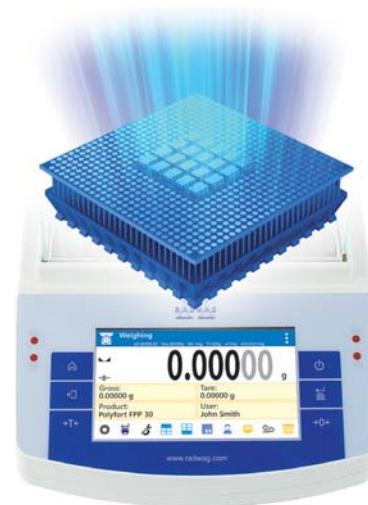
## Data archiving and exchange

The USB interface facilitates the transfer of reports on processes and partial weighing to peripheral devices. This is especially useful for archiving and monitoring purposes. In addition, the USB interface allows copying of input databases.

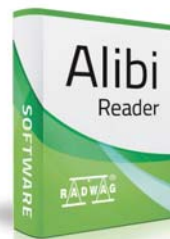


## ALIBI memory secure storage of measurements

ALIBI memory offers effective data protection, and it allows 500 000 weighings. This guarantees safety and continuity of your vital data stored over long period of time.



Option of exporting data from ALIBI memory to your balance.



ALIBI Reader PC software enables the user to overview all weighings recorded in balance memory. The software allows printout of selected data and preparation of PDF and CSV (Excel) reports.

No.	Date and time	Serial number	User name	Product code	Batch	Unit	Type	Precision	Number of last digit number	Last digit number	Stability
1110	2014.01.03 12:18:18	12310000	UMED4	13.5000	UMED	g	0.0000	4	0	0	Yes
1112	2014.01.03 12:18:18	12310000	UMED4	17.0273	UMED	mg	0.0000	4	0	0	Yes
1113	2014.01.03 12:18:18	12310000	UMED4	17.0273	UMED	mg	0.0000	4	0	0	Yes
1114	2014.01.03 12:18:18	12310000	UMED4	17.0273	UMED	mg	0.0000	4	0	0	Yes
1115	2014.01.03 12:18:20	12310000	UMED4	17.0273	UMED	mg	0.0000	4	0	0	Yes
1116	2014.01.03 12:18:20	12310000	UMED4	8.9885	AM4	g	0.0000	4	0	0	Yes
1117	2014.01.03 12:18:20	12310000	UMED4	8.9885	AM4	g	0.0000	4	0	0	Yes
1118	2014.01.03 12:18:20	12310000	UMED4	8.9885	AM4	g	0.0000	4	0	0	Yes
1119	2014.01.03 12:18:20	12310000	UMED4	386.50	AM2	g	0.00	2	0	0	Yes
1120	2014.01.03 12:18:20	12310000	UMED4	386.50	AM2	g	0.00	2	0	0	Yes
1121	2014.01.03 12:18:23	12310000	UMED4	386.52	AM2	g	0.00	2	0	0	Yes
1122	2014.01.03 12:18:23	12310000	UMED4	386.52	AM2	g	0.00	2	0	0	Yes
1123	2014.01.03 12:18:23	12310000	UMED4	386.52	AM2	g	0.00	2	0	0	Yes
1124	2014.01.03 12:18:24	12310000	UMED4	198.76	g	0.00	2	0	0	0	Yes
1125	2014.01.03 12:18:24	12310000	UMED4	198.81	g	0.00	2	0	0	0	Yes
1126	2014.01.03 12:18:25	12310000	UMED4	198.82	g	0.00	2	0	0	0	Yes
1127	2014.01.03 12:18:25	12310000	UMED4	198.80	g	0.00	2	0	0	0	Yes
1128	2014.01.03 12:21:09	12310000	TRSD	UMED4	198.73	g	0.00	2	0	0	Yes
1129	2014.01.03 12:21:09	12310000	TRSD	UMED4	198.78	g	0.00	2	0	0	Yes
1130	2014.01.03 12:21:09	12310000	TRSD	UMED4	198.71	g	0.00	2	0	0	Yes
1131	2014.01.03 12:21:10	12310000	TRSD	UMED4	198.74	g	0.00	2	0	0	Yes
1132	2014.01.03 12:21:12	12310000	TRSD	UMED4	8.19875	mg	0.00000	5	0	0	Yes
1133	2014.01.03 12:21:12	12310000	TRSD	UMED4	8.19875	mg	0.00000	5	0	0	Yes
1134	2014.01.03 12:21:13	12310000	TRSD	UMED4	8.19875	mg	0.00000	5	0	0	Yes
1135	2014.01.03 12:21:13	12310000	TRSD	UMED4	8.19878	mg	0.00000	5	0	0	Yes
1136	2014.01.03 12:21:13	12310000	TRSD	UMED4	8.19878	mg	0.00000	5	0	0	Yes



# Reports and printouts

## Customized reports

X2 series balances offer reports comprising three customized sections. As a user you have the green light for free modification of each section content.

-----	
Working mode	Weighing
Date	18.05.2015
Time	11:36:36
Balance type	AS 220.X2
Balance ID	2035
Product	PILL
User	John Smith
Net weight	0.8020 g
Tare	0.5000 g
Gross weight	1.3010 g
----- Calibration Report -----	
Calibration type	Internal
User	John Smith
Project	124/SGW/2015
Date	18.05.2015
Time	12:56:10
Balance ID	1035
Calibration difference	0.0000 g
-----	
Signature	-----

Sample report divided into three configurable sections: header, GLP printout and footer.

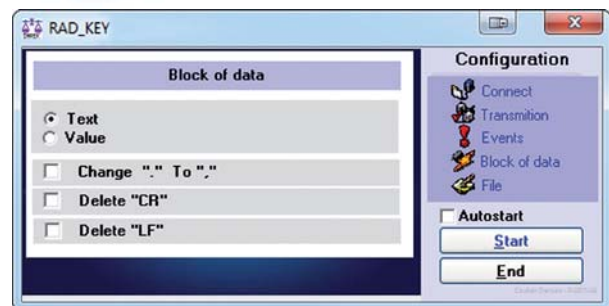
All X2 balances cooperate with computer printers supporting PCL standard. Communication between the devices is established via USB or RS 232 interface.

## Printouts of measurements sent to PC software

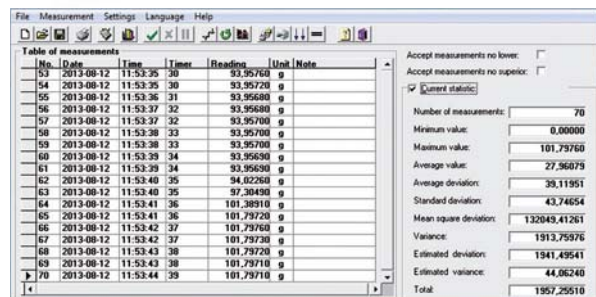
Measurements carried out by X2 series balance can be transferred directly to RAD-KEY and PW-WIN PC software.



RAD-KEY PC Software is designed to acquire your balance data, with the use of special HotKey, which is then entered into an active spreadsheet cell.



PW-WIN PC Software is designed to present measurements in a visual form, produce statistics, and export data to a spreadsheet.





RADWAG

0.72182

www.radwag.com

# Technical specification



**AS.X2**

**PS.X2**

**APP.X2**

Max capacity [Max]	60 g - 310 g	200 g - 10000 g	10 kg - 35 kg
Readability [d]	0.01 mg - 0.1 mg	1 mg - 100 mg	0.01g - 0.1 g
Weighing pan size	ø90 mm, ø100 mm, ø85 mm (option)	128 × 128 mm, 195 × 195 mm	348 × 260 mm
Stabilization time	3.5 s - 6 s	1.5 s - 3 s	2 s - 3 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
Display	5" color capacitive touchscreen	5" color capacitive touchscreen	5" color capacitive touchscreen
Interfaces	2 × RS 232, USB A, USB B, Ethernet, Wi-Fi (option)		
Verification <b>M</b>	●	●	○

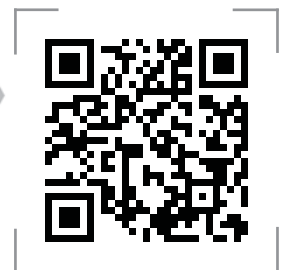
Functions and technical specification of device are subject to change without prior notice

## Optional equipment

- Barcode readers,
- PCL printers,
- USB keyboard,
- PC Software: PW-WIN, RAD-KEY and ALIBI Reader,
- Under-pan weighing rack,
- Anti-vibration tables,
- Draft shield,
- LCD WD-6 display,
- Density determination kit for solids and liquids.

Read QR code

and view complete  
technical specification  
of all X2 series balances



Optional equipment accessibility is conditioned by a particular model.

## PC software



### PW-WIN

Cooperation with a computer, measurements presentations, statistics.



### RAD-KEY

Capturing balance data, inserting the data into a spreadsheet cell.

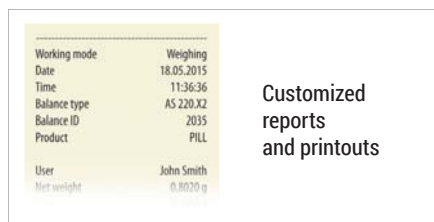
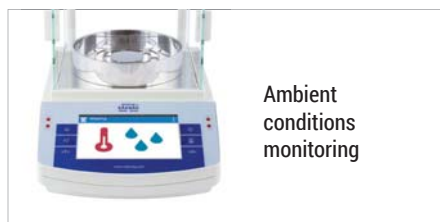
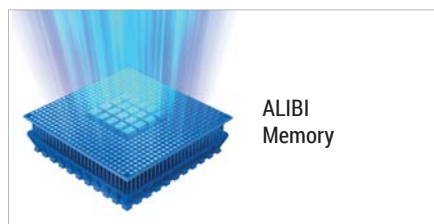
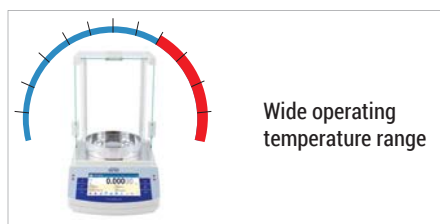


### ALIBI Reader



















Capturing balance data recorded in ALIBI memory.



## Features:



## Functions:

-  Parts counting
-  Checkweighing
-  Dosing
-  Formulation
-  Percent weighing
-  Statistics
-  Animal weighing
-  Peak hold
-  Density Determination
-  GLP Procedures
-  Under-pan weighing
-  Autotest
-  Infrared sensors
-  Ambient conditions monitoring
-  Newton unit measurements
-  Units
-  ALIBI memory
-  Cooperation with titrators

