# WLC X2 Precision Balances

Advanced weighing under laboratory and less challenging industrial conditions

WLC X2, d = 0.01 g

WLC X2, d = 0.1 g

WLC X2, d = 0.001 g

Communication interfaces

## Functions

| | | | | |
|---|---|---|---|---|
| Parts counting | Percent weighing | Density determination | GLP procedures | Alibi memory |
| Dosing | Statistics | Under hook weighing | Proximity sensors | Replaceable unit |
| Checkweighing | Animal weighing | Peak hold | Ambient conditions measurement | Multilingual menu |
| Formulations | Autotest | | | |

## Features

**Reliable Results and High Measurement Precision**
Excellent performance and weighing precision enable applying WLC X2 balances in laboratories and industries.

**Excellent Weighing Parameters and Comfort of Operation**
Thanks to a clear and intuitive menu layout and 5" colour touch screen, maximum comfort and incredibly easy operation are both ensured.

**Customization via Widgets**
WLC X2 software enables designing widgets layout on the display. Display customization allows you to run any selected function directly from the home screen.

**Automatic Adjustment**
Internal adjustment system guarantees the highest accuracy and reliable measurements results.

**Touch-Free Operation**
Two programmable proximity sensors can be assigned with any function or application. The given function when assigned is both run and operated touch-free.

**Numerous Options od Data Management**
The instrument enables saving all data of carried out measurements as reports and graphs.

**Wide Capacity Range for Different Applications**
Wide capacity range enables you to select appropriate weighing instrument suiting your needs and requirements.

# Technical Specifications

| | WLC 0.2.X2 | WLC 0.6.X2 | WLC 1/10.X2 | WLC 2.X2 |
|---|---|---|---|---|
| **Maximum capacity [Max]** | 0.2 kg | 0.6 kg | 1 kg / 10 kg | 2 kg |
| **Minimum load** | — | — | — | — |
| **Readability [d]** | 0.001 g | 0.01 g | 0.01 g / 0.1 g | 0.01 g |
| **Verification scale interval [e]** | — | — | — | — |
| **Tare range** | –0.2 kg | –0.6 kg | –10 kg | –2 kg |
| **Repeatability*** | 0.0014 g | 0.008 g | 0.015 g / 0.08 g | 0.015 g |
| **Linearity** | ±0.003 g | ±0.03 g | ±0.03 g / ±0.3 g | ±0.03 g |
| **Stabilization time** | 2 s | 2 s | ~ 4 s / 2 s | 2 s |
| **Adjustment** | internal | internal | external | internal |
| **Verification** | — | — | — | — |
| **OIML Class** | — | — | — | — |
| **Display** | 5″ capacitive colour touch screen | 5″ capacitive colour touch screen | 5″ capacitive colour touch screen | 5″ capacitive colour touch screen |
| **Keypad** | 6 keys | 6 keys | 6 keys | 6 keys |
| **Protection class** | IP 43 | IP 43 | IP 43 | IP 43 |
| **Touch-free operation** | 2 programmable proximity sensors | 2 programmable proximity sensors | 2 programmable proximity sensors | 2 programmable proximity sensors |
| **USB-A** | 1 | 1 | 1 | 1 |
| **USB-B** | 1 | 1 | 1 | 1 |
| **RS 232** | 2 | 2 | 2 | 2 |
| **Wireless Connection** | 802.11 b/g/n | 802.11 b/g/n | 802.11 b/g/n | 802.11 b/g/n |
| **Ethernet** | 10 / 100 Mbit | 10 / 100 Mbit | 10 / 100 Mbit | 10 / 100 Mbit |
| **Power consumption** | 12 ÷ 16 V DC | 12 ÷ 16 V DC | 12 ÷ 16 V DC | 12 ÷ 16 V DC |
| **Power supply** | 4 W | 4 W | 4 W | 4 W |
| **Operating temperature** | +10 ÷ +40 °C | +10 ÷ +40 °C | +10 ÷ +40 °C | +10 ÷ +40 °C |
| **Atmospheric humidity**** | 40 ÷ 80 % | 40 ÷ 80 % | 40 ÷ 80 % | 40 ÷ 80 % |
| **Weighing pan dimensions** | ø 100 mm | 128 × 128 mm | 195 × 195 mm | 195 × 195 mm |
| **Weighing device dimensions** | 333 × 206 × 280 mm | 333 × 206 × 100 mm | 333 × 206 × 100 mm | 333 × 206 × 100 mm |
| **Net weight** | 1.8 kg | 2.2 kg | 2.2 kg | 2.2 kg |
| **Gross weight** | 3.4 kg | 3.8 kg | 3.8 kg | 3.8 kg |
| **Packaging dimensions** | 470 × 380 × 336 mm | 470 × 380 × 336 mm | 470 × 380 × 336 mm | 470 × 380 × 336 mm |

\*      repeatability is expressed as a standard deviation from 10 weighing cycles
\*\*      non-condensing conditions
In accordance with type approval, the balance parameters are maintained in temperature range: +15 ÷ +35 °C.

| | WLC 6.X2 | WLC 10.X2 | WLC 20.X2 | WLC 21.X2 |
|---|---|---|---|---|
| Maximum capacity [Max] | 6 kg | 10 kg | 20 kg | 21 kg |
| Minimum load | — | — | — | — |
| Readability [d] | 0.1 g | 0.1 g | 0.1 g | 1 g |
| Verification scale interval [e] | — | — | — | — |
| Tare range | –6 kg | –10 kg | –20 kg | –21 kg |
| Repeatability* | 0.1 g | 0.08 g | 0.1 g | 0.8 g |
| Linearity | ±0.3 g | ±0.3 g | ±0.3 g | ±3 g |
| Stabilization time | 2 s | 2 s | 3 s | 3 s |
| Adjustment | internal | external | external | external |
| Verification | — | — | — | — |
| OIML Class | — | — | — | — |
| Display | 5" capacitive colour touch screen | 5" capacitive colour touch screen | 5" capacitive colour touch screen | 5" capacitive colour touch screen |
| Keypad | 6 keys | 6 keys | 6 keys | 6 keys |
| Protection class | IP 43 | IP 43 | IP 43 | IP 43 |
| Touch-free operation | 2 programmable proximity sensors | 2 programmable proximity sensors | 2 programmable proximity sensors | 2 programmable proximity sensors |
| USB-A | 1 | 1 | 1 | 1 |
| USB-B | 1 | 1 | 1 | 1 |
| RS 232 | 2 | 2 | 2 | 2 |
| Wireless Connection | 802.11 b/g/n | 802.11 b/g/n | 802.11 b/g/n | 802.11 b/g/n |
| Ethernet | 10 / 100 Mbit | 10 / 100 Mbit | 10 / 100 Mbit | 10 / 100 Mbit |
| Power consumption | 12 ÷ 16 V DC | 12 ÷ 16 V DC | 12 ÷ 16 V DC | 12 ÷ 16 V DC |
| Power supply | 4 W | 4 W | 4 W | 4 W |
| Operating temperature | +10 ÷ +40 ℃ | +10 ÷ +40 ℃ | +10 ÷ +40 ℃ | +10 ÷ +40 ℃ |
| Atmospheric humidity** | 40 ÷ 80 % | 40 ÷ 80 % | 40 ÷ 80 % | 40 ÷ 80 % |
| Weighing pan dimensions | 195 × 195 mm | 195 × 195 mm | 195 × 195 mm | 195 × 195 mm |
| Weighing device dimensions | 333 × 206 × 100 mm | 333 × 206 × 100 mm | 333 × 206 × 100 mm | 333 × 206 × 100 mm |
| Net weight | 2.2 kg | 2.2 kg | 2.2 kg | 2.2 kg |
| Gross weigh | 3.8 kg | 3.8 kg | 3.8 kg | 3.8 kg |
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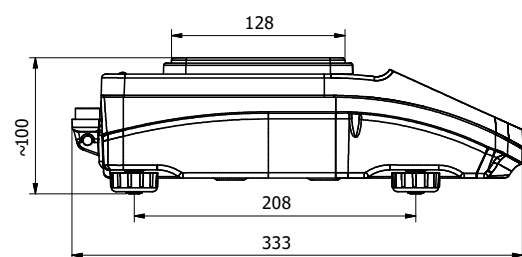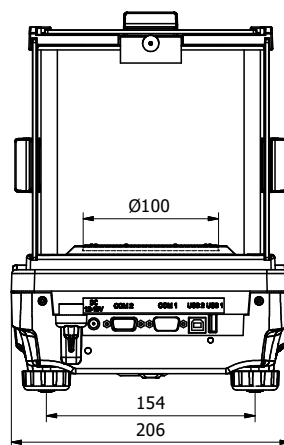\*       repeatability is expressed as a standard deviation from 10 weighing cycles
\*\*       non-condensing conditions
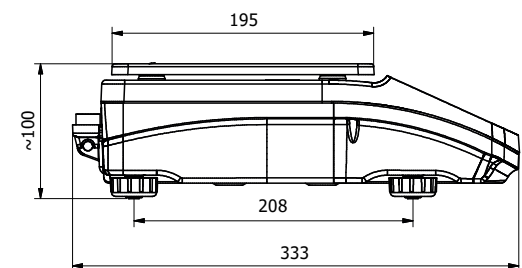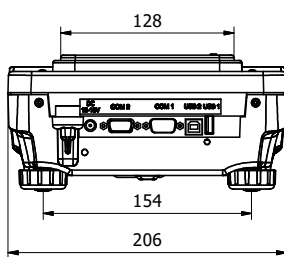In accordance with type approval, the balance parameters are maintained in temperature range: +15 ÷ +35 ℃.
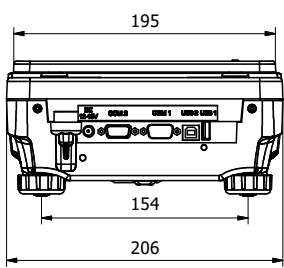
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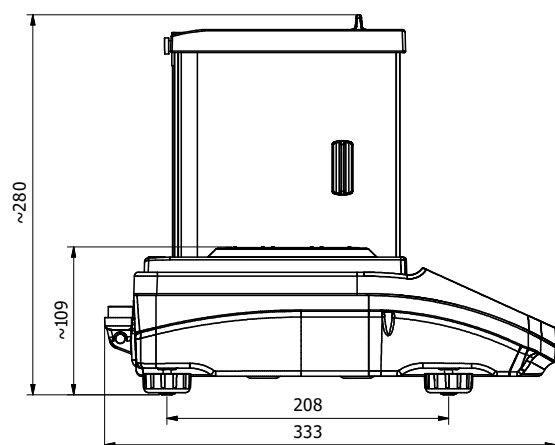


WLC X2, d = 0.001 mg



WLC X2, d = 0.01 mg



WLC X2, d = 0.1 mg

# Accessories

**Weighing Tables**
• granite antivibration table

**Professional Weighing**
• under-hook weighing rack

**Peripheral Devices**
• Epson dot matrix printer
• barcode scanners
• WD-6 LCD display

**Cables, Converters**
• P0108: RS 232 cable (balance-computer)
• P0151: RS 232 cable (balance - Epson printer)
• USB cable type A-B

**Electrical Accessories**
• ZR-02 power supply with battery

**Remaining Accessories**
• suitcase for PS

# Dedicated Software

**R-LAB**
- collecting measurements
- carrying out statistical analysis of measurements
- customized graphs and reports

**E2R Weighing Records**
- complete, automated databases synchronization
- fully supported processes of labelling and parts counting
- record of weighings, weighings archiving
- basic and advanced (with graphs) reports

**Alibi Reader**
- readout of data saved to Alibi memory
- export of data saved to Alibi memory
- data filtering and reports generating
- saving ALIBI database to CSV file

**R.Barcode**
- The basic function software is presentation of the data sent by barcode scanners connected to PC via USB or RS232

**RAD KEY**
- Establishing cooperation between a weighing instrument and a computer

**Radwag Development Studio**
- presentation of functions (and subfunctions) of communication protocol (Common Communication Protocol)
- possibility of connection with weighing equipment on which each function is carried out,
- library with mass control, contained within the development environment
- complete documentation of the communication protocol
- set of user manuals for different solutions addressed for programmers employed in companies using RADWAG-manufactured weighing equipment

**RADWAG Connect**
- establishing communication with all balances, scales and weighing modules using Common Communication Protocol
- communication via local network,
- support of basic functions
- auto searching for devices
- connecting with few devices simultaneously, swapping between them
- clear list of connected platforms
- record of measurements in the program,
- export of carried out measurements to CSV file,
- work performed using freely selected device with Windows 10 operating system

**LabView Driver**
- operation of RADWAG balances in LabView environment