

WLC Precision Balances

Standard weighing and mobility for majority of laboratory and industrial applications





WLC F1/R direct indicator-platform connection



WLC F1/K 1 m cable connection



WLC C2/R direct indicator-platform connection



WLC C2/K 2.5 m cable connection

Functions



Parts counting





Percent weighing



Peak hold



Totalizing



Alibi memory



In-built battery





Replaceable unit



Tare memory

Features

Measurements Accuracy and Performance

Measurement accuracy and robust design of the WLC balances enable precise mass determination under laboratory and industrial conditions.

Fast Measurement and Uncomplicated Operation

Easy operation enables fast and reliable measurements to be carried out even by an inexperienced operator.

Clearly Presented Indications

Simple and easy-to-read LCD display assures clear presentation of the weighing result under various working conditions.

Mobility Due to an Internal Battery

In addition to power supply from the mains, the WLC balances are equipped with an external battery that enables several hours long mobile operation.

Numerous Variants of Weighing Pan Dimensions

Numerous variants of weighing pan dimensions enable selecting the best weighing instrument suiting specific requirements and needs.

Wide Capacity Range for Different Applications

Due to an exceptionally wide range of capacities it is possible to work with samples of different weight, from few grams to even over one hundred kilograms.

Page 1 of 5 | Date: 18.07.2018 www.radwag.com

Technical Specifications

	20 kg
Minimum load — 5 q —	
	_
Readability [d] 0.01 g 0.1 g 0.1 g	0.1 g
Verification scale interval [e] — — 1 g —	_
Tare range −1 kg −2 kg −6 kg −10 kg	-20 kg
Repeatability* 0.01 g 0.01 g 0.1 g	0.1 g
Linearity ±0.03 g ±0.03 g ±0.2 g ±0.3 g	±0.3 g
Stabilization time3 s3 s3 s3 s	3 s
Adjustment external (2 stages) external (2 stages) — external (2 stages)	external (2 stages)
Verification — Yes —	_
OIML Class — — — — — —	_
Display LCD (with backlight) LCD (with backlight) LCD (with backlight) LCD (with backlight)	LCD (with backlight)
Keypad 6 keys 6 keys 6 keys	6 keys
Protection class IP 43 IP 43 IP 43 IP 43	IP 43
USB-A 1 1 1 1	1
USB-B 1 1 1 1	1
RS 232 2 2 2	2
IN/OUT** $4 \times \text{IN}, 4 \times \text{OUT}$	$4 \times IN, 4 \times OUT$
Power consumption 6W 6W 6W	6 W
60 Hz / 12 V DC	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery
Operation time on batteries 15 h 15 h 15 h 15 h	15 h
Operating temperature $+15 \div +30 ^{\circ}\text{C}$ $+15 \div +30 ^{\circ}\text{C}$ $+15 \div +30 ^{\circ}\text{C}$ $+15 \div +30 ^{\circ}\text{C}$	+15 ÷ +30 ℃
Atmospheric humidity*** 10 ÷ 85% RH 10 ÷ 85% RH 10 ÷ 85% RH 10 ÷ 85% RH	10 ÷ 85% RH
Weighing pan dimensions $195 \times 195 \text{ mm}$	195 × 195 mm
Weighing device $333 \times 206 \times 97 \text{ mm}$ dimensions	333 × 206 × 97 mm
Net weight 2.8 kg 2.8 kg 2.8 kg	2.8 kg
Gross weight 4.3 kg 4.3 kg 4.3 kg	4.3 kg
Packaging dimensions $470 \times 380 \times 336 \text{ mm}$	470 × 380 × 336 mm

^{*} repeatability is expressed as a standard deviation from 10 weighing cycles

In accordance with type approval, the balance parameters are maintained in temperature range: $+15 \div +35$ °C.

Page 2 of 5 | Date: 18.07.2018 www.radwag.com

^{**} optional solution

^{***} non-condensing conditions

	WLC 6/F1/K WLC 6/F1/R	WLC 12/F1/K WLC 12/F1/R	WLC 30/F1/K WLC 30/F1/R	WLC 60/C2/K WLC 60/C2/R	WLC 120/C2/K WLC 120/C2/R
Maximum capacity [Max]	6 kg	12 kg	30 kg	60 kg	120 kg
Minimum load	5 g	_	_	50 g	_
Readability [d]	0.1 g	0.2 g	0.5 g	1 g	2 g
Verification scale interval [e]	1 g	_	_	10 g	_
Tare range	-6 kg	–12 kg	–30 kg	-60 kg	–1 20 kg
Repeatability*	0.1 g	0.2 g	0.5 g	1 g	2 g
Linearity	±0.2 g	±0.6 g	±1.5 g	±2 g	±6 g
Stabilization time	3 s	3 s	3 s	3 s	3 s
Adjustment	_	external (2 stages)	external (2 stages)	_	external (2 stages)
Verification	Yes	_	_	Yes	_
OIML Class	II	_	_	II	_
Display	LCD (with backlight)	LCD (with backlight)	LCD (with backlight)	LCD (with backlight)	LCD (with backlight)
Indicator fastening	1 m cable connection (K), direct connection (R)	1 m cable connection (K), direct connection (R)	1 m cable connection (K), direct connection (R)	2.5 m cable connection (K), direct connection (R)	2.5 m cable connection (K), direct connection (R)
Keypad	5 keys	5 keys	5 keys	5 keys	5 keys
Protection class	IP 43	IP 43	IP 43	IP 43	IP 43
RS 232	1	1	1	1	1
RS 232**	1	1	1	1	1
Power consumption	6 W				
		6 W	6 W	6 W	6 W
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery	6 W 100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery	6 W 100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery	6 W 100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery	6 W 100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery
Power supply Operation time on batteries	60 Hz / 12 V DC + battery	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC
	60 Hz / 12 V DC + battery	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery
Operation time on batteries	60 Hz / 12 V DC + battery 10 h	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h
Operation time on batteries Operating temperature	60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C
Operation time on batteries Operating temperature Atmospheric humidity**	60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH
Operation time on batteries Operating temperature Atmospheric humidity** Weighing pan dimensions Weighing device	60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 300 × 300 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 300 × 300 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 300 × 300 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 400 × 500 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 400 × 500 mm
Operation time on batteries Operating temperature Atmospheric humidity** Weighing pan dimensions Weighing device dimensions	60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 300 × 300 mm 445 × 300 × 70 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 300 × 300 mm 445 × 300 × 70 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 300 × 300 mm 445 × 300 × 70 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 400 × 500 mm 547 × 502 × 103 mm	100 ÷ 240 V AC 50 ÷ 60 Hz / 12 V DC + battery 10 h +15 ÷ +30 °C 10 ÷ 85% RH 400 × 500 mm 547 × 502 × 103 mm

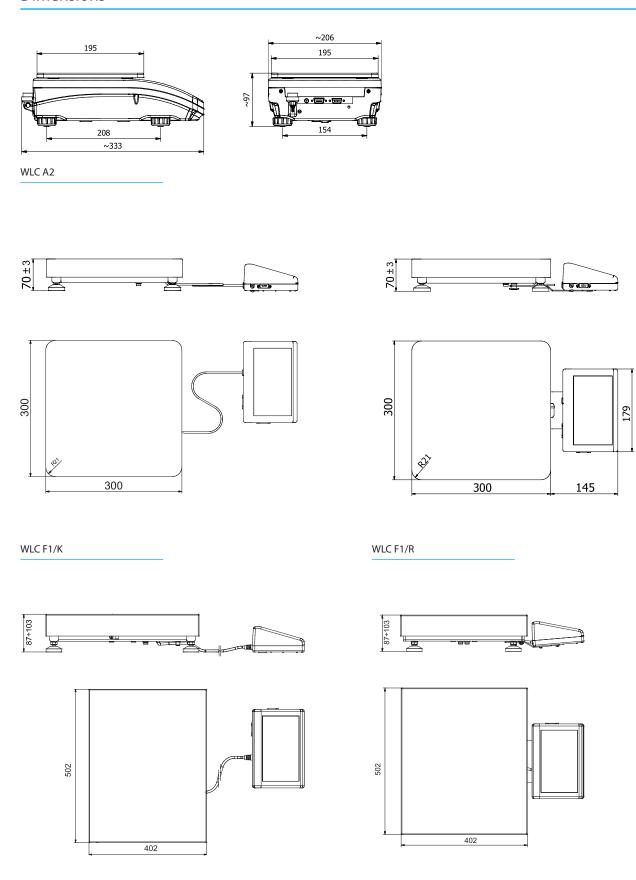
repeatability is expressed as a standard deviation from 10 weighing cycles

*** non-condensing conditions
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Page 3 of 5 | Date: 18.07.2018 www.radwag.com

optional solution

Dimensions



WLC C2/R

Page 4 of 5 | Date: 18.07.2018

WLC C2/K

Accessories

Weighing Tables

• granite antivibration table

Professional Weighing

• under-hook weighing rack

Peripheral Devices

- Epson dot matrix printer
- WD-4/4 LCD display

Cables, Converters

- P0108: RS 232 cable (balance-computer)
- P0151: RS 232 cable (balance Epson printer)
- KR-01 converter
- AP2-1 power loop output

Remaining Accessories

• suitcase for WLC/A1-A2

Dedicated Software

R-LAB

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

LabView Driver

• operation of RADWAG balances in LabView environment

Scale editor

• Software designed to enable change of parameters in the PUEC/31 indicator.

RAD KEY

• Establishing cooperation between a weighing instrument and a computer

R. Barcode

• The basic function software is presentation of the data sent by barcode scanners connected to PC via USB or RS232

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

Page 5 of 5 | Date: 18.07.2018 www.radwag.com