BALANCES & TEST SERVICE 2023

PRECISION BALANCES



Precision balances KERN PLS · PLJ



Range of precision balances with enormous weighing capacities - ideal for heavy tare containers or large samples

Features

STANDARD

- 1 Convenient recipe-weighing: with the recipe database, in which up to 99 recipes can be stored, each with up to 20 recipe ingredients with name and target value
- · Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display
- Rapid and efficient operation thanks to the graphics display. Simple, clear user interface on the display in the following languages: DE, EN, FR, IT, ES, PT
- · Dosage aid: High stability mode and other filter settings can be selected
- · KERN PLJ: Automatic internal adjustment, guarantees high degree of accuracy and makes the balance independent of its location of use. Ideal for mobile applications which require verification, such as ambulatory gold and jewellery purchasing
- 🛛 PLJ 2000-3A: High-quality milligram balance with enormous weighing range up to 2100 g ideal for large samples or heavy tare containers. Large glass draught shield for easy access to the items being weighed. Weighing space W×D×H 160×170×225 mm, standard
- Ring-shaped draught shield standard, only for models with weighing plate size Ø 110 mm, weighing space Ø×H 150×60 mm







· Protective working cover included with delivery

Technical data

- Backlit LCD Graphic display, digit height 15 mm
- · Dimensions weighing surface ▲ Ø 110 mm, stainless steel
- Ø 160 mm, stainless steel, see larger picture W×D 200×175 mm, stainless steel
- Permissible ambient temperature 15 °C/35 °C

Accessories

FACTORY

- · Protective working cover, scope of delivery 5 items, KERN PLJ-A01S05
- I Hook f. underfloor weighing, KERN PLJ-A02
- · Set for density determination of liquids and solids for models with [d] = 0,001 g, KERN ALT-A02
- · Minimum weight of sample, smallest weight to be weighed, depending on the required process accuracy, only in combination with a DAkkS calibration certificate, KERN 969-103
- · Equipment qualification: compliant qualification concept which includes the following validation services, Installation Qualification (IQ), Operating Qualification (OQ)

	GLP	<u> </u>	- <u>·</u> + • • • •		NTIS 🛼	DAkks	M	
CAL INT CAL EXT RS 232 PLJ PLS	INTERN PCS	RECIPE PERCEN	T TOL UNDE	PLS-F/	FORCE 1 DAY PLS-A/	ET +3 DAYS	+3 DAYS PLJ-M	
Madal	\ A /=:	Deedek II.		PLJ-F	PLJ-A			Onting
Model	Weighing	Readability	Verification	Minimal load	Linearity	Weighing		Option
	capacity	r	value			plate	Verification	DAkkS Calibr. Certificate
	[Max]	[d]	[e]	[Min]			MI	DAkkS
KERN	g	g	g	g	g		KERN	KERN
PLS 420-3F	420	0,001	-	-	± 0,004	A	-	963-127
PLS 720-3A	720	0,001	-	-	± 0,002	A	-	963-103
PLS 1200-3A	1200	0,001	-	-	± 0,003	A	-	963-103
PLS 4200-2F	4200	0,01	-	-	± 0,04	В	-	963-127
PLS 6200-2A	6200	0,01	-	-	± 0,03	В	-	963-104
PLS 8000-2A	8200	0,01	-	-	± 0,04	В	-	963-104
PLS 20000-1F	20000	0,1	-	-	± 0,4	C	-	963-128
PLJ 420-3F	420	0,001	-	-	± 0,003	A	-	963-127
PLJ 720-3A	720	0,001	-	-	± 0,002	A	-	963-103
PLJ 1200-3A	1200	0,001	-	-	± 0,003	A	-	963-103
PLJ 2000-3A	2100	0,001	-	-	± 0,004	A	-	963-103
PLJ 4200-2F	4200	0,01	-	-	± 0,04	В	-	963-127
PLJ 6200-2A	6200	0,01	-	-	± 0,03	В	-	963-104
Note: For applications that require verification, please order verificati on at the same time, initial verification at a later date is not possible.								
Verification at the factory, we need to know the full address of the location of use.								
PLJ 720-3AM	720	0,001	0,01	0,02	± 0,002	A	965-216	963-103
PLJ 6200-2AM	6200	0,01	0,1	0,5	± 0,03	В	965-217	963-104



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KERN PICTOGRAMS





Internal adjusting:

Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)



Adjusting program CAL:

For quick setting up of the balance's accuracy. External adjusting weight required



Easy Touch:

Suitable for the connection, data transmission and control through PC or tablet.



Memory:

Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.



Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.



• 888. •

RS 232

• 1998. •

RS 485

KERN Universal Port (KUP):

allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WLAN, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort

Data interface RS-232:

To connect the balance to a printer, PC or network



To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible

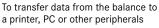
USB data interface:

To connect the balance to a printer, PC or other peripherals



USB

Bluetooth* data interface:





0^0

SWITCH

WiFi data interface:

To transfer data from the balance to a printer, PC or other peripherals

Control outputs (optocoupler, digital I/O):

To connect relays, signal lamps, valves, etc.



Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements



Interface for second balance:

For direct connection of a second balance

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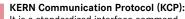
mLab



KCP

Network interface: For connecting the scale to an

Ethernet network



It is a standardized interface command PROTOCOL set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems





PRINTER

The balance displays weight, date and time, independent of a printer connection

GLP/ISO log:

With weight, date and time. Only with KERN printers.



Reference quantities selectable. PCS Display can be switched from piece to weight

Recipe level A:

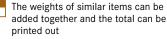
The weights of the recipe ingredients RECIPE can be added together and the total weight of the recipe can be printed out



Internal memory for complete recipes RECIPE with name and target value of the recipe ingredients. User guidance through display



Totalising level A:



Determining the deviation in % from

Percentage determination:

the target value (100 %)

%

B

Weighing units: Can be switched to e.g. nonmetric UNIT units. See balance model. Please refer to KERN's website for more details

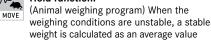


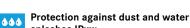
*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under

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Weighing with tolerance range: (Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model

Hold function: M--





splashes IPxx: The type of protection is shown in the pictogram.

Suspended weighing: Load support with hook on the UNDER underside of the balance

Battery operation:



Ready for battery operation. The battery type is specified for each device



Rechargeable battery pack: Rechargeable set



Universal plug-in power supply: with universal input and optional input socket adapters for A) EU, CH, GB B) EU, CH, GB, USA C) EU, CH, GB, USA, AUS



Plug-in power supply: 230V/50Hz in standard version for EU, CH.

On request GB, USA or AUS version available



Integrated power supply unit:

Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request



Weighing principle: Strain gauges Electrical resistor on an elastic deforming body



Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate



Weighing principle: Electromagnetic force compensation

Coil inside a permanent magnet. For the most accurate weighings



Weighing principle: Single cell technology:

Advanced version of the force compensation principle with the highest level of precision



Verification possible: The time required for verification is +3 DAYS specified in the pictogram



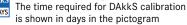
DAkkS calibration possible (DKD):

The time required for internal shipping prepa-

The time required for internal shipping prepa-

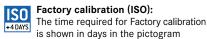
rations is shown in days in the pictogram

rations is shown in days in the pictogram



Package shipment:

Pallet shipment:



1 DAY

2 DAYS

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