BALANCES & TEST SERVICE 2023

PRECISION BALANCES



IoT-Line Precision balance KERN 572



All-rounder e.g. as precision balance in the laboratory or in harsh industrial applications, ideal for the diverse possibilities of Industry 4.0 applications

Features

- Thanks to the many typical laboratory functions, such as, for example, recipe function, percentage determination, combined with the high level of precision, the KERN 572 is a reliable partner for day-to-day work in the laboratory
- The robust version, typical industrial functions, such as piece-counting, vibrationfree weighing and the large weighing ranges also make these balances ideal for all industrial applications, where a high level of precision is required
- KERN Universal Port (KUP): permits the connection of an external KUP interface adapter, such as, for example, RS-232, USB, Bluetooth or Ethernet, for the exchange of data and control commands, without any installation outlay

- KERN Communication Protocol (KCP): The KCP permits searching and remote control of the balance using external control devices or computers, for details see page 8/9
- Standardised, simplified concept of operation
- Freely programmable weighing unit, e.g. display direct in special units such as length of thread g/m, paper weight g/m², or similar
- The robust aluminium diecast housing maintains the stability, protects the weighing technology elements and is robust enough to cope with everyday use
- Ring-shaped draught shield standard, only for models with weighing plate size ▲ Ø 106 mm, weighing space Ø×H 157×43 mm
- Level indicator to level the balance precisely
- Loop for underfloor weighing, standard for
- models with [d] = 0,001 g • Protective working cover included with delivery





Technical data

- Large backlit LCD display, digit height 21 mm
- Dimensions weighing surface, stainless steel
 Ø 106 mm
- Ø 150 mm
- W×D 160×200 mm, see larger picture
- Overall dimensions (without draught shield)
 W×D×H 180×310×85 mm
- Net weight M, B approx. 2,4 kg
 approx. 2,8 kg
- Permissible ambient temperature -10 °C/40 °C

Accessories

- Protective working cover, scope of delivery: 5 items, KERN 572-A02S05
- Internal rechargeable battery pack, operating time up to 48 h without backlight, charging time approx. 8 h, KERN YKR-01
- External data interface RS-232, interface cable included, KERN YKUP-01
- External data interface USB, interface cable included, KERN YKUP-03
- Extension-Box, KERN YKUP-13
- Loop and hook for underfloor weighing, for models with [d] ≥ 0,01 g, KERN 572-A03
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed. Weighing space W×D×H 150×140×130 mm, for models with weighing plate size A, KERN 572-A05

STANDARD											OPTION				FACTORT				
E	1	КСР	GLP	<u>.</u>	▲^	%	C		^_	É	B			1		•∽•	DAkkS		
CAL	EXT KI	UP PROTOCOL	PRINTER	PCS	RECIPE	PERCENT	UNIT	TOL	MOVE	UNDER	MULTI	DMS	1 DAY	ET	RS 232	USB	+3 DAYS	ACCU	
			14/			D 1 1			1 11 11			•.	•	1.11	147 . 1				

Model	Weighing capacity	Readability	Reproducibility	Linearity	Resolution	Weighing plate	Option DAkkS Calibr. Certificate		
	[Max]	[d]					DAkkS		
KERN	g	g	g	g	Points		KERN		
572-30	240	0,001	0,001	± 0,003	240.000	Α	963-127		
572-31	300	0,001	0,002	± 0,005	300.000	Α	963-127		
572-32	420	0,001	0,002	± 0,005	420.000	A	963-127		
572-33	1600	0,01	0,01	± 0,03	160.000	В	963-127		
572-35	2400	0,01	0,01	± 0,03	240.000	В	963-127		
572-37	3000	0,01	0,02	± 0,05	300.000	В	963-127		
572-39	4200	0,01	0,02	± 0,05	420.000	В	963-127		
572-45	12000	0,05	0,05	± 0,15	240.000	C	963-128		
572-55	20000	0,05	0,1	± 0,25	400.000	C	963-128		
572-43	10000	0,1	0,1	± 0,3	100.000	C	963-128		
572-49	16000	0,1	0,1	± 0,3	160.000	C	963-128		
572-57	24000	0,1	0,1	± 0,3	240.000	C	963-128		



🔘 www.imlab.eu - info@imlab.eu

BALANCES & TEST SERVICE 2023

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

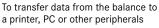
USB data interface:

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

license. Other trademarks and trade names are those of their respective owner

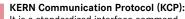
mLab



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:

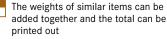
The weights of the recipe ingredients RECIPE can be added together and the total weight of the recipe can be printed out



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

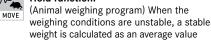


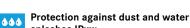
*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under

🔘 www.imlab.eu - info@imlab.eu

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



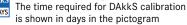
DAkkS calibration possible (DKD):

The time required for internal shipping prepa-

The time required for internal shipping prepa-

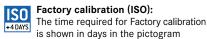
rations is shown in days in the pictogram

rations is shown in days in the pictogram



Package shipment:

Pallet shipment:



1 DAY

2 DAYS

() +33(0)3 20 55 19 11 () +32(0)16 73 55 72