BALANCES & TEST SERVICE 2023

SCHOOL BALANCES

<u>KERN</u>

School balance KERN EMB



Entry level laboratory balance with tremendous weighing performance

Features

- Simple and convenient 2-key operation
- Tare function facilitates formulation work
- Particularly flat design
- Ready for use: Batteries included
- II Ring-shaped draught shield standard, only for models with weighing plate size
 Ø 82 mm, weighing space Ø×H 96×35 mm
- Hook for underfloor weighing standard
- I Also available as KERN EMB 500-1BE Black Edition
- Note: With the optional auxiliary set for density determination KERN YDB-04 also well suited for school and teaching operation

Technical data

- Large LCD display, digit height 15 mm
- Dimensions weighing surface
 ▲ Ø 82 mm, plastic, with conductive lacquer
- Ø 105 mm, plastic
- Ø 150 mm, plastic, see large picture
 Batteries included, 9 V block,
- respectively 2×1.5 V AA
- Net weight approx. 0,85 kg
- Permissible ambient temperature 5 °C/35 °C











Accessories

- Stainless steel weighing plate, only for models with weighing plate size II, KERN EMB-A02
- External universal mains adapter, with universal input and optional input socket adapters for EU, CH, GB, USA, KERN YKA-03N
- Ancillary kit for density determination of liquids and solids with density > 1. Scope of supplies: Bridge for holding the beaker (Ø 102 mm), hook (H 139 mm), suitable for models with weighing plate size A, KERN YDB-04

STANDARD	OPTION		
	ATT DMS 1 DAY	MULTI DAkkS	

Model	Weighing capacity [Max]	Readability [d]	Reproducibility	Linearity	Housing dimensions W×D×H	Weighing plate	Option DAkkS Calibr. Certificate DAkkS
KERN	g	g	g	g	mm		KERN
EMB 100-3	100	0,001	0,001	± 0,005	170×244×54	А	963-127
EMB 200-3	200	0,001	0,001	± 0,005	170×244×54	А	963-127
EMB 200-2	200	0,01	0,01	± 0,02	170×244×39	В	963-127
EMB 600-2	600	0,01	0,01	± 0,03	170×244×39	В	963-127
EMB 1000-2	1000	0,01	0,01	± 0,05	170×244×39	C	963-127
EMB 2000-2	2000	0,01	0,01	± 0,05	170×244×39	C	963-127
EMB 500-1	500	0,1	0,1	± 0,2	170×244×39	C	963-127
EMB 500-1BE	500	0,1	0,1	± 0,2	170×244×39	C	963-127
EMB 1200-1	1200	0,1	0,1	± 0,3	170×244×39	C	963-127
EMB 3000-1	3000	0,1	0,1	± 0,3	170×244×39	C	963-127
EMB 6000-1	6000	0,1	0,1	± 0,3	170×244×39	C	963-128
EMB 2200-0	2200	1	1	± 2	170×244×39	C	963-127
EMB 5.2K1	5200	1	1	± 3	170×244×39	С	963-128
EMB 5.2K5	5200	5	5	± 10	170×244×39	C	963-128

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 PCS 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

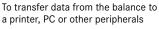
USB data interface:

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



USB

Bluetooth* data interface:





WiFi data interface:

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

Control outputs _0^0_ SWITCH

(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:

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

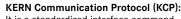
For direct connection of a second balance



KCP

Network interface: For connecting the scale to an

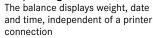
Ethernet network



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







GLP/ISO log: GLP

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



PRINTER

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

Recipe level A:

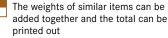
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



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 %)

%

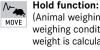
B

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



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:



(Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value



KERN & SOHN GmbH · Ziegelei 1 · 72336 Balingen · Germany · Tel. +49 7433 9933-0 · www.kern-sohn.com · info@kern-sohn.com

*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

Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram.

Suspended weighing: Load support with hook on the UNDER

Battery operation:

underside of the balance

Ready for battery operation. The battery BATT 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. 230 V 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

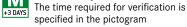


Weighing principle: Single cell technology:

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



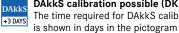
Verification possible:



Factory calibration (ISO):

Package shipment:

Pallet shipment:



ISO

1 DAY

2 DAYS

DAkkS calibration possible (DKD): The time required for DAkkS calibration

The time required for Factory calibration

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

is shown in days in the pictogram