

Precision balances KERN EW-N · EG-N



The classic balance with robust tuning fork measuring system



GLP/ISO record keeping of weighing data, balance adjustment, etc. with date, time and identification no... Ideal for monitoring and documenting your processes in accordance with your quality management system



Percentage determination: makes it possible to store a given weight value (100 %) and to determine deviations from this target value



Weighing with tolerance range (check-weighing): a visual signal helps with portion division, dispensing or grading

Precision balances KERN EW-N · EG-N



Features

- 1 only EG-NM: **Internal adjustment (CAL) by rotary knob** on the side. Guarantees high degree of accuracy and makes the location irrelevant
- 2 only EW-NM: **Adjusting program CAL** for quick setting of the balance accuracy, external test weights at an additional price, see page 143 ff.
- Capacity display:** A bar lights up to show how much of the weighing range is still available
- Precise counting:** The automatic optimisation of reference weight gradually improves the average value of the piece weight
- Draft shield** standard for models with weighing plate sizes A. Removable metal cover with pipette opening, weighing space WxDxH 158x130x78 mm



Technical data

- Large LCD display, digit height 17 mm
- Dimensions of weighing plate (stainless steel)
 - A 118 mm, see larger picture
 - B 170x142 mm
 - C 180x160 mm
- Overall dimensions (without draft shield) WxDxH
 - A, B 182x235x75 mm
 - C 192x265x87 mm
- Net weight approx. 1,3 kg
- Permissible ambient temperature 10 °C / 30 °C

Accessories

- Protective working cover** over keyboard and housing, standard, can be reordered. For models with weighing plate sizes
 - A, B KERN EG-A05
 - C KERN EG-A09
- Rechargeable battery pack internal**, operating time up to 32 h without backlight, charging time approx. 12 h. **AUTO-OFF function** to preserve the battery, can be switched off. For models with weighing plate sizes



- A, B KERN EG-A04
- C KERN EG-A06
- 3 **Large glass draught shield** with 3 sliding doors for easy access to the items being weighed, Weighing space WxDxH 150x140x130 mm, can be reordered for models with weighing plate sizes A, KERN EG-A03
- Loop for underfloor weighing**, not included, for models with weighing plate sizes
 - A, B KERN EG-A07
 - C KERN EG-A08
- RS-232/Ethernet adapter** to connect balances with an RS-232 interface to a network, using Ethernet, details see page 139, KERN YKI-01
- Suitable printers** see page 138

STANDARD

CAL INT

CAL EXT

RS 232

GLP PROTOCOL

PCS

PERCENT

UNIT

TOL

UNDER

230 V

T-FORK

1 DAY

3 YEARS WARRANTY

OPTION

ACCU

DKD +3 DAYS

FACTORY

M

+3 DAYS

Model	Weighing range [Max] g	Readout [d] g	Verific. value [e] g	Repro-ducibility g	Linearity g	Weighing plate	Options			
							Verification		DKD Calibr. Certificate	
							M KERN		DKD KERN	
KERN										
EW 220-3NM	220	0,001	–	0,001	± 0,002	A	–		963-127	
EW 420-3NM	420	0,001	–	0,001	± 0,003	A	–		963-127	
EW 620-3NM	620	0,001	–	0,001	± 0,003	A	–		963-127	
EW 820-2NM	820	0,01	–	0,01	± 0,01	B	–		963-127	
EW 2200-2NM	2200	0,01	–	0,01	± 0,01	C	–		963-127	
EW 4200-2NM	4200	0,01	–	0,01	± 0,02	C	–		963-127	
EW 6200-2NM	6200	0,01	–	0,01	± 0,03	C	–		963-128	
EW 12000-1NM	12000	0,1	–	0,1	± 0,2	C	–		963-128	
Note: For applications that require verification, please order verification 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.										
EG 220-3NM	220	0,001	0,01	0,001	± 0,002	A	965-216	U	963-127	
EG 420-3NM	420	0,001	0,01	0,001	± 0,003	A	965-216	U	963-127	
EG 620-3NM	620	0,001	0,01	0,001	± 0,004	A	965-201	I	963-127	
EG 2200-2NM	2200	0,01	0,1	0,01	± 0,01	C	965-216	U	963-127	
EG 4200-2NM	4200	0,01	0,1	0,01	± 0,02	C	965-216	U	963-127	

KERN Pictograms



Internal adjusting (CAL): Quick setting of the balance's accuracy with internal adjusting weight (motordriven).



Adjusting program (CAL): For quick setting of the balance's accuracy. External adjusting weight required.



Memory: Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU.



Data interface RS-232: To connect the balance to a printer, PC or network.



RS 485 data interface: To connect the balance to a printer, PC or other peripheral devices. High tolerance against electromagnetic disturbance.



USB data interface: To connect the balance to a printer, PC or other peripheral devices.



Bluetooth data interface: To transfer data from the balance to a printer, PC or other peripheral devices.



Control outputs (optocoupler, digital I/O): to connect relays, signal lamps, valves, etc.



Interface for second balance: for direct connection of a second balance.



Network interface: For connecting the scale to an Ethernet network. With KERN products you can also use a universal RS-232/LAN converter.



GLP/ISO record keeping: of weighing data with date, time and identification-no. Only with printers from KERN.



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



Recipe level A: Separate memory for the weight of the tare container and the recipe ingredients (net total).



Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through displays.



Recipe level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through displays. Additional convenient functions, such as bar-code and back calculation functions.



Percentage determination: Determining the deviation in % from the target value (100%).



Weighing units: Can be switched to e. g. non-metric units at the touch of a key. See balance model. Please refer to KERN's website for more details.



Weighing with tolerance range: Upper and lower limiting can be programmed individually, e.g. dosing/sorting and portioning.



Vibration-free weighing: (Animal weighing program) Vibrations are filtered out so that a stable weight is obtained.



Spray and dust protection IPxx: The type of protection is shown by the pictogram. For details see the glossary.



Stainless steel: the balance is protected against corrosion.



Suspended weighing: load support with hook on the underside of the balance.



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



Rechargeable battery pack: rechargeable set.



Mains adapter: 230V/50Hz in standard version for Germany. On request GB, AUS or USA version.



Power supply: integrated in balance. 230V/50Hz in Germany. More standards e. g. GB, AUS, USA on request.



Strain gauges: Electrical resistor on an elastic deforming body.



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



Electromagnetic force compensation: Coil in a permanent magnet. For the most accurate weighings.



Single cell technology: Advanced version of the force compensation principle with the highest level of precision.



Verification possible: The time required for verification is specified in the pictogram.



DKD calibration possible: The time required for DKD calibration is shown in days in the pictogram.



Package shipment: The time required to manufacture the product internally is shown in days in the pictogram.



Pallet shipment: The time required to manufacture the product internally is shown in days in the pictogram.



Warranty: The warranty period is shown in the pictogram.

Precision is our business

To ensure the high precision of your balance KERN offers you the appropriate test weight package for your balance, consisting of the test weight, box and DKD certificate, as proof of its accuracy ... the best pre-requisite for proper balance calibration.

In the extensive KERN test weight range, you will find test weights in the international OIML error limit classes: E1, E2, F1, F2, M1, M2, M3 with weights from 1 mg - 2000 kg.

The KERN DKD calibration laboratory for electronic balances and weights has been accredited by DKD since 1994 and today is one of the most modern and best-equipped DKD calibration laboratories for balances, test weights and force-measurement in Europe.

(DKD = German Calibration Service)

Thanks to the high level of automation, we can carry out DKD calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

Range of services:

- DKD calibration of balances with a maximum load of up to 6 t
- DKD calibration of weights in the range of 1 mg – 500 kg
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DKD calibration certificates in the following languages
D, GB, F, I, E, NL, PL

Do you have questions about your scale, the corresponding test weight or the calibration service? Your KERN specialist dealer will be pleased to assist you.

Your KERN specialist dealer: