Precision balances KERN KB-N · KB-NM · KBJ(SK)









Verification at an entry-level price, now also with internal automatic adjustment

Features

- NEW - KERN KBJ with internal automatic adjustment when there are variations in temperature or at defined, time-controlled intervals. Guarantees high degree of accuracy and makes the location irrelevant
- **User guidance step by step** through Yes/No dialogue on the display
- **Percentage determination:** parts taken out of a container which is on the weighplate can be displayed as a percentage. Convenient when carrying out drying processes, during which the evaporated moisture or the remaining weight can be displayed as a percentage
- **Ring-shaped draft shield** standard, only for models with weighing plate sizes A, weighing space ØxH 90x40 mm

Technical data

- Backlit LCD display, digit height 9 mm
- Dimensions of weighing plate (stainless steel*)
  A Ø 81 mm
  B Ø 130x130 mm*
  C WxD 150x170 mm*, see larger picture
- Overall dimensions without draft shield WxDxH 167x250x85 mm
- Net weight approx. 1,1 kg; KBJ: approx. 1,5 kg
- Permissible ambient temperature KB-N: 10 °C / 40 °C KB-NM, KBJ: 10 °C / 30 °C

Accessories

- **Protective working cover** over keyboard and housing, standard, can be reordered, for models with weighing plate sizes
  A KERN PCB-A02
  B KERN PCB-A04
  C KERN PCB-A05
- **Rechargeable battery pack internal**, operating time up to 15 h, charging time approx. 10 h, KERN KB-A01N
- **Rechargeable battery pack external**, operating time up to 30 h without backlight (KBJ: 20 h), charging time approx. 10 h, KERN KS-A01
- **Suitable printers** see page 138

STANDARD: CAL INT (only KBJ), CAL EXT, RS 232, GLP PROTOCOL, PCS, RECIPE, PERCENT, UNIT, MOVE, UNDER, 230 V, DMS, 1 DAY, 2 YEARS WARRANTY

OPTION: ACCU, DKD +3 DAYS

FACTORY: M +7 DAYS

Model KERN	Weighing range [Max] g	Readout [d] g	Verific. value [e] g	Repro-ducibility g	Linearity g	Weighing plate		Options: Verification KERN		Options: DKD Calibr. Certificate KERN	
KB 120-3N	120	0,001	–	0,001	± 0,003	A		–		963-127	
KB 240-3N	240	0,001	–	0,001	± 0,003	A		–		963-127	
KB 360-3N	360	0,001	–	0,002	± 0,005	A		–		963-127	
KB 1200-2N	1200	0,01	–	0,01	± 0,03	B		–		963-127	
KB 2000-2N	2000	0,01	–	0,01	± 0,03	B		–		963-127	
KB 2400-2N	2400	0,01	–	0,01	± 0,03	B		–		963-127	
KB 3600-2N	3600	0,01	–	0,02	± 0,05	B		–		963-127	
KB 10K0.05N	10000	0,05	–	0,05	± 0,15	C		–		963-128	
KB 10000-1N	10000	0,1	–	0,1	± 0,3	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.											
KB 650-2NM	650	0,01	0,1	0,01	± 0,03	B		965-216		963-127	
KB 6500-1NM	6500	0,1	1	0,1	± 0,2	C		965-217		963-128	
1 **Automatic internal adjustment**											
KBJ 650-2NM	650	0,01	0,1	0,01	± 0,03	B		965-216		963-127	

New model

KERN Pictograms

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

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

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

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

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

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

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

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

DUAL — **Interface for second balance:** for direct connection of a second balance.

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

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

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

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

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

C RECIPE — **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 barcode and back calculation functions.

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

UNIT — **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.

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

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

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

INOX — **Stainless steel:** the balance is protected against corrosion.

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

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

ACCU — **Rechargeable battery pack:** rechargeable set.

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

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

DMS — **Strain gauges:** Electrical resistor on an elastic deforming body.

T-FORK — **Tuning fork principle:** A resonating body is electromagnetically excited, causing it to oscillate.

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

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

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

DKD +3 DAYS — **DKD calibration possible:** The time required for DKD calibration is shown in days in the pictogram.

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

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

3 YEARS WARRANTY — **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 the appropriate test weight package for your balance, consisting of the test weight, box and DKD certificate, as proof of ist 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 corresponsing test weight or the calibration service ? Your KERN specialist dealer will be pleased to assist you.

Your KERN specialist dealer: