

PRECISION BALANCES



PROFESSIONAL MEASURING



2015

KERN Pictograms



Internal adjusting:

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



Recipe level A:

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



Suspended weighing:

Load support with hook on the underside of the balance.



Adjusting program CAL:

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



Recipe level B:

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



Battery operation:

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



Memory:

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



Recipe level C:

Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation functions.



Rechargeable battery pack:

Rechargeable set.



Data interface RS-232:

To connect the balance to a printer, PC or network.



Mains adapter:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available.



RS-485 data interface:

To connect the balance to a printer, PC or other peripherals. High tolerance against electromagnetic disturbance.



Totalising level A:

The weights of similar items can be added together and the total can be printed out.



Power supply:

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



USB data interface:

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



Totalising level C:

Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation.



Strain gauges:

Electrical resistor on an elastic deforming body.



Bluetooth data interface:

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



Tuning fork principle:

A resonating body is electromagnetically excited, causing it to oscillate.



WLAN data interface:

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



Percentage determination:

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



Electromagnetic force compensation:

Coil inside a permanent magnet. For the most accurate weighings.



Control outputs

(optocoupler, digital I/O):

To connect relays, signal lamps, valves, etc.



Weighing units:

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



Single cell technology:

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



Interface for second balance:

For direct connection of a second balance.



Weighing with tolerance range:

Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning.



Verification possible:

The time required for verification is specified in the pictogram.



Network interface:

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



Vibration-free weighing:

(Animal weighing program)

When the weighing conditions are unstable, a stable weight is calculated as an average value.



DAkkS calibration possible:

The time required for DAkkS calibration is shown in days in the pictogram.



GLP/ISO log:

The balance displays the weight, date and time, regardless of a printer connection.



Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram. For details see the glossary.



Package shipment:

The time required for internal shipping preparations is shown in days in the pictogram.



GLP/ISO log:

With weight, date and time. Only with KERN printers, see "Accessories"



ATEX explosion protection:

Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.



Pallet shipment:

The time required for internal shipping preparations is shown in days in the pictogram.



Piece counting:

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



Stainless steel:

The balance is protected against corrosion.



Warranty:

The warranty period is shown in the pictogram.



Compact precision balance with large weighing range, as well as EC type approval [M] and automatic internal adjustment

Features

- **KERN KBJ with internal automatic adjustment:** Every time the balance is restarted it is adjusted automatically, which guarantees a high degree of accuracy and makes it independent of its location
- Ideal for mobile applications which require verification, such as ambulatory gold and jewellery purchasing
- **User guidance step by step** through Yes/No dialogue on the display
- **Ring-shaped draught shield** standard, only for models with weighing plate size ■, weighing space ØxH 90x40 mm

Technical data

- Backlit LCD display, digit height 9 mm
- Weighing plate dimensions, stainless steel*
 - Ø 81 mm, plastic, with conductive lacquer
 - WxD 130x130 mm*
 - WxD 150x170 mm*, see enlarged picture
- Overall dimensions without draught shield WxDxH 167x250x85 mm
- Net weight approx. 2 kg, for details see the internet
- Permissible ambient temperature
 - KERN KB-N: 10 °C / 40 °C
 - KERN KB-NM, KBJ: 10 °C / 30 °C

Accessories

- **Protective working cover** over keyboard and housing, standard, can be retrofitted, for models with weighing plate size
 - KERN PCB-A02, ■ KERN PCB-A04
 - KERN PCB-A05
- **Rechargeable battery pack internal**, operating time up to 15 hours with backlight, charging time approx. 10 h, KERN KB-A01N,
- **only KB-N: Rechargeable battery pack external**, operating time up to 15 hours with backlight, charging time approx. 10 h, KERN KS-A01,
- **Suitable test weights**, also with calibration certificate, see the internet
- **Suitable printers** see page 157 ff.

STANDARD



OPTION



FACTORY



| Model | Weighing range [Max] g | Readout [d] g | Verification value [e] g | Reproducibility g | Linearity g | Weighing plate | | Options | | | |
|--|------------------------|---------------|--------------------------|-------------------|-------------|----------------|--|---------------------|---|---------------------------|--|
| | | | | | | | | Verification | | DAkkS-Calibr. Certificate | |
| KERN | | | | | | | | M II KERN | | DAkkS 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 | |



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Use the above details to contact us if this literature doesn't answer all your questions.

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

