



Multifunctional laboratory balance with single-cell weighing system and EC type approval [M]



2 only PBS: **Adjusting program CAL** for quick setting of the balance accuracy, external test weights at an additional price



**Simple recipe weighing and documenting** with a combined tare/print function. In addition, the ingredients for the recipe are numbered automatically and printed out with their corresponding number and nominal weight



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

Precision balances KERN PBS · PBJ



Features

- **1** only PBJ: **Automatic internal adjustment** in the case of a change in temperature and time-controlled at defined intervals, guarantees high degree of accuracy and makes the balance independent of its location of use. Ideal for mobile applications which require verification, such as ambulatory gold and jewellery purchasing
- **Metal housing:** robust and sturdy
- **Dosage aid:** High-stability mode and other filter settings can be selected
- **Weighing with tolerance range (checkweighing):** Input of an upper/lower limit value. A visual signal assists with portioning, dispensing or grading
- **Totalising** of individual weighing results
- **Identification number:** 4 digits, printed on calibration protocol freely programmable
- **Automatic data output to the PC/printer** each time the balance is steady
- **2** **Draught shield** standard, on all models with readout [d] = 0,001 g, weighing space WxDxH 180x193x87 mm



Technical data

- Large backlit LCD display, digit height 14 mm
- Weighing plate dimensions, stainless steel, WxD
  - A** 108x105 mm
  - B** 170x180 mm, see enlarged picture
- Overall dimensions (without draught shield) WxDxH 209x322x78 mm
- Net weight approx. 3 kg
- Permissible ambient temperature 10 °C / 30 °C

Accessories

- **Protective working cover** over keyboard and housing, standard. Can be re-ordered, scope of delivery: 5 items for models with weighing plate size
  - A** KERN PBS-A01S05
  - B** KERN PBS-A02S05



- **5** Single-cell advanced technology:
  - **Fully automatic manufactured weighing cell from one piece of material**
  - **Stable temperature behaviour**
  - **Short stabilisation time: 3 sec**
  - **Shock proof construction**
  - **High corner load performance**
- **4** **Set for density determination** for models with weighing plate size
  - A** KERN PBS-A04
  - B** KERN PBS-A03For interesting facts about density determination 214
- **RS-232/Ethernet adapter** for connection to an IP-based Ethernet network, for details see page 180, KERN YKI-01
- **Suitable test weights**, also with calibration certificate see page 188
- **Suitable printers** and further, extensive accessories from page 177 ff.

STANDARD



OPTION



FACTORY



Model	Weighing range [Max] g	Readout [d] g	Verification value [e] g	Minimum load [Min] g	Repro-ducibility g	Linearity g	Weighing plate	Options			
								Verification		DAkkS Calibr. Certificate	
								M KERN		DKD KERN	
KERN											
PBS 620-3M	620	0,001	-	-	0,001	± 0,002	A	-	-	963-127	
PBS 4200-2M	4200	0,01	-	-	0,01	± 0,02	B	-	-	963-127	
PBS 6200-2M	6200	0,01	-	-	0,01	± 0,02	B	-	-	963-128	
PBS 8200-1M *	8200	0,1	-	-	0,1	± 0,2	B	-	-	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.											
PBJ 620-3M	620	0,001	0,01	0,1	0,001	± 0,002	A	965-201	I	963-127	
PBJ 4200-2M	4200	0,01	0,1	0,5	0,01	± 0,02	B	965-216	II	963-127	
PBJ 6200-2M	6200	0,01	0,1	1	0,01	± 0,02	B	965-202	I	963-128	
PBJ 8200-1M	8200	0,1	1	5	0,1	± 0,2	B	965-217	II	963-128	

\* ONLY WHILE STOCKS LAST

Price reduction

# KERN Pictograms:



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



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



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



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



**Rechargeable battery pack:** Rechargeable set.



**Alibi memory:** Electronic archiving of weighing results, complying with the 2009/23/EC standard.



**Recipe level C:** Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, barcode.



**Universal mains adapter:** with universal input and optional input socket adapters for  
A) EU, GB  
B) EU, GB, CH, USA  
C) EU, GB, CH, USA, AUS



**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, USA or AUS 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, USA or AUS 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, adjustment of recipe when dosages are exceeded, multiplier function, barcode recognition.



**Weighing principle: Strain gauge**  
Electrical resistor on an elastic deforming body.



**Bluetooth\* data interface:** To transfer data from the balance to a printer, PC or other peripherals.



**Weighing principle: Tuning fork**  
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 %).



**Weighing principle: 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. non-metric units at the touch of a key. See balance model. Please refer to KERN's website for more details.



**Weighing principle: 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.



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



**DAKkS calibration possible (DKD):** The time required for DAKkS calibration is shown in days in the pictogram.



**Wireless data transfer:** between the weighing unit and the evaluation unit using an integrated radio module.



**Protection against dust and water splashes IPxx:** The type of protection is shown in the pictogram.



**Package shipment:** The time required for internal shipping preparations is shown in days in the pictogram.



**GLP/ISO log:** The balance displays the weight, date and time, regardless of a printer connection.



**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.



**GLP/ISO log:** With weight, date and time. Only with KERN printers.



**Stainless steel:** The balance is protected against corrosion.



**Warranty:** The warranty period is shown in the pictogram.

## KERN – Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight in the international OIML error limit classes E1-M3 from 1 mg - 2000 kg. In combination with a DAKkS calibration certificate the best pre-requisite for proper balance calibration.

The KERN DAKkS calibration laboratory today is one of the most modern and best-equipped DAKkS calibration laboratories for balances, test weights and force-measurement in Europe.

Thanks to the high level of automation, we can carry out DAKkS calibration of

balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

### Range of services:

- DAKkS calibration of balances with a maximum load of up to 50 t
- DAKkS calibration of weights in the range of 1 mg – 2500 kg
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DAKkS calibration certificates in the following languages D, GB, F, I, E, NL, PL

## Your KERN specialist dealer: