

Analytical balance KERN ABT



- Single-cell advanced technology:
- Fully automatic manufacture weighing cell from one piece of material
 - Stable temperature behaviour
 - Short stabilisation time
 - Shock proof construction
 - High corner load performance

The premium model with single-cell weighing system

Features

- **Automatic internal adjustment** in the case of a change in temperature > 0,5 °C and time-controlled every 4 hours
- **Dosage aid:** High-stability mode and other filter settings can be selected
- **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
- **Identification number:** 4 digits, printed on calibration protocol freely programmable
- **Automatic data output to the PC/printer** each time the balance is steady

- **Large glass draught shield** with 3 sliding doors for easy access to the items being weighed

Technical data

- Large LCD display, digit height 14 mm
- Weighing plate dimensions Ø 80 mm
- Overall dimensions WxDxH 217x356x338 mm
- Weighing space WxDxH 168x172x223 mm
- Net weight approx. 7 kg
- Permissible ambient temperature 10 °C / 30 °C

Accessories

- **Protective working cover**, standard. Can be re-ordered, scope of delivery: 5 items, KERN ABT-A02S05
- **1 Set for density determination** of liquids and solids with density $\leq/\geq 1$. The density is indicated directly on the display, for details see page 182, KERN YDB-03
- **2 Ioniser** to neutralise electrostatic charge, see page 184, KERN YBI-01
- **3 Weighing table** to absorb vibrations and oscillations, which would otherwise distort the weighing result, see page 184, KERN YPS-03
- **Suitable printers** see page 177 ff.

STANDARD



OPTION





FACTORY



Model	Weighing range [Max] g	Readout [d] mg	Verification value [e] mg	Minimum load [Min] mg	Reproducibility mg	Linearity mg	Options		
							Verification		DAkkS Calibr. Certificate
							MI KERN		DKD KERN
ABT 120-4M	120	0,1	1	10	0,1	± 0,2	965-201		963-101
ABT 220-4M	220	0,1	1	10	0,1	± 0,2	965-201		963-101
ABT 320-4M	320	0,1	1	10	0,1	± 0,3	965-201		963-101
ABT 100-5M	101	0,01	1	1	0,05	± 0,15	965-201		963-101
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.									
Dual-range balance switches automatically to the next largest weighing range [Max] and readout [d].									
ABT 120-5DM	42 120	0,01 0,1	1 1	1	0,02 0,1	± 0,05 0,2	965-201		963-101
ABT 220-5DM	82 220	0,01 0,1	1 1	1	0,05 0,1	± 0,1 0,2	965-201		963-101

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.	 Totalising level A: The weights of similar items can be added together and the total can be printed out.	 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 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.	 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.	 Weighing principle: Strain gauge Electrical resistor on an elastic deforming body.	 Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate.
 Bluetooth* 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.
 WLAN data interface: To transfer data from the balance to a printer, PC or other peripherals.	 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.
 Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.	 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.
 Interface for second balance: For direct connection of a second balance.	 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.
 Network interface: For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter.	 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.
 Wireless data transfer: between the weighing unit and the evaluation unit using an integrated radio module.	 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: The balance displays the weight, date and time, regardless of a printer connection.	 Stainless steel: The balance is protected against corrosion.	 Warranty: The warranty period is shown in the pictogram.
 GLP/ISO log: With weight, date and time. Only with KERN printers.		

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: