Analytical balance KERN ABT



PREMIUM ★★★


1


2

Single-cell advanced technology:
- **Fully automatic manufactured weighing cell from one piece of material**
- **Stable temperature behaviour**
- **Short stabilisation time:** Steady weight values within approx. 5 sec under laboratory conditions
- **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 recipeweighing and documenting** with a combined tare/print function. In addition, the mixing ingredients for the recipe are numbered automatically and printed out with their corresponding number and weight value
- **Identification number:** 4 numeric positions, printed on calibration protocol
- **Automatic data output to the PC/printer** every time the balance is steady

Technical data

- Large LCD display, digit height 14 mm
- Dimensions of weighing plate 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 reordered, KERN ABT-A02
- **Set for density determination** of liquids and solids with density ≤/≥1, details see page 142. The density is indicated directly on the display, details see page 142, KERN YDB-03
- 1 **Ioniser** to neutralise electrostatic charge, KERN YBI-01
- 2 **Weighing table** to absorb vibrations and oscillations, which would otherwise distort the weighing result, KERN YPS-03
- **Suitable printers** see page 138

STANDARD

CAL INT · RS 232 · GLP PROTOCOL (only with printer) · PCS · RECIPE · PERCENT · UNDER · UNIT · 230 V · SC TECH · 1 DAY · 3 YEARS WARRANTY

OPTION: DKD +3 DAYS

FACTORY: M +3 DAYS

Model KERN	Weighing range [Max] g	Readout [d] mg	Verific. value [e] mg	Minimum load [Min] mg	Repro-ducibility mg	Linearity mg		Options Verification MI KERN		DKD Calibr. Certificate 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	
Dual-range balance (D = Dual): 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	

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.

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 barcode 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 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: