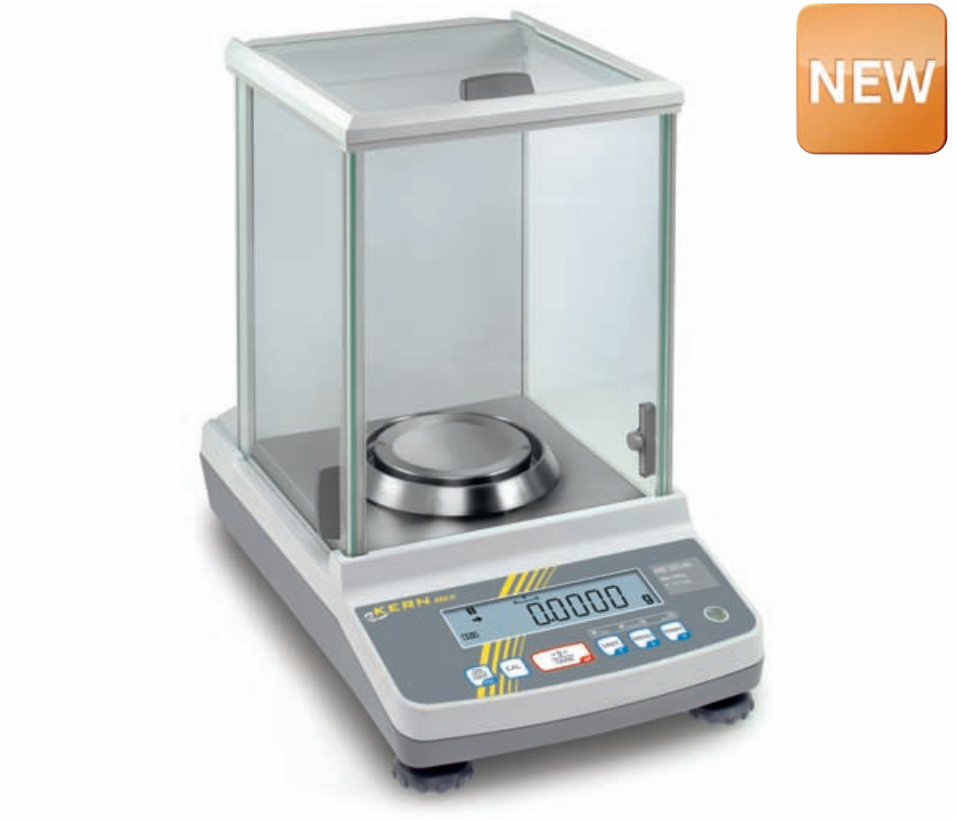
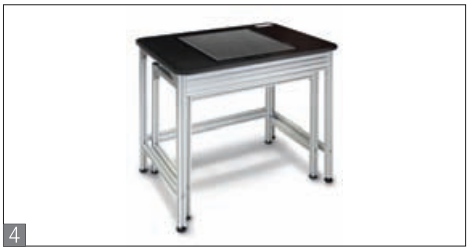
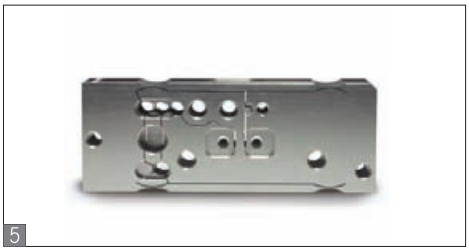
Analytical balance KERN ABS-N · ABJ-NM



NEW



4



5

5 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. 3 sec under laboratory conditions
- **Shock proof construction**
- **High corner load performance**

The bestseller in analytical balances, now with high-quality single-cell weighing system and EC type approval [M]

Features

- 1 Only ABJ-N: **Automatic internal adjustment** in the case of a change in temperature > 2 °C or time-controlled every 4 hours
- 2 Only ABS-N: **Adjusting program CAL**, external test weights at an additional price, see page 133 ff.
- **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 each time the balance reaches a steady state

Technical data

- Large LCD display, digit height 14 mm
- Dimensions of weighing plate Ø 91 mm
- Overall dimensions WxDxH 210x340x325 mm
- weighing space WxDxH 174x162x227 mm
- Permissible ambient temperature 10 °C / 30 °C
- Net weight approx. 6 kg

Accessories

- 3 **Data interface RS-232** interface cable included, KERN ACS-A01
- **Protective working cover** standard, can be reordered, KERN ACS-A02
- **Set for density determination** of liquids and solids, KERN ACS-A03
- **Ioniser** to neutralise electrostatic charge, see page 132, KERN YBI-01
- 4 **Weighing table** to absorb vibrations and oscillations, which would otherwise distort the weighing result, see page 132, KERN YPS-01
- **Suitable printers** see page 130

STANDARD: CAL INT 1 · CAL EXT 2 · GLP PROTOCOL (only with printer) · PCS · RECIPE · PERCENT · UNIT · TOL · SC TECH 5 · 1 DAY · 3 YEARS WARRANTY

OPTION: DKD +3 DAYS

FACTORY: RS 232 3 · +3 DAYS (only ABJ-NM)

Model KERN	Weighing range [Max] g	Read-out [d] g	Verific. value [e] g	Minimum load [Min] mg	Repro-ducibility g	Linea-rity mg		Options: Verification MI KERN	Options: Verification	Options: DKD Calibr. Certificate DKD KERN	Options: DKD Calibr. Certificate
ABS 80-4N	80	0,1	–	–	0,2	± 0,3		–	–	963-101	
ABS 120-4N	120	0,1	–	–	0,2	± 0,3		–	–	963-101	
ABS 220-4N	220	0,1	–	–	0,2	± 0,3		–	–	963-101	
ABS 320-4N	320	0,1	–	–	0,2	± 0,3		–	–	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.											
ABJ 80-4NM	80	0,1	1	10	0,2	± 0,3		965-201		963-101	
ABJ 120-4NM	120	0,1	1	10	0,2	± 0,3		965-201		963-101	
ABJ 220-4NM	220	0,1	1	10	0,2	± 0,3		965-201		963-101	
ABJ 320-4NM	320	0,1	1	10	0,2	± 0,3		965-201		963-101	

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

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

Net-total weighing: weight of tare cup and weight of components memorized in two separate stores.

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

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.

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 level of precision of your balance, KERN offers the appropriate test weight package for your balance. This consists of the test weight, box and DKD calibration certificate, as proof of its accuracy. The best way to ensure 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, and M3 with weights from 1 mg to 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 ~ UKAS)

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 6000 kg
- 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:

KERN – Professional measuring. Measuring technology and testing services from a single source

DKD-K-11801

German Excellence Group
Member

KERN & SOHN GmbH • Ziegelei 1 • 72336 Balingen • Germany • Phone + 49-7433-9933-0 • Fax + 49-7433-9933-149 • www.kern-sohn.com • info@kern-sohn.com