

Analytical balances KERN ABS-N · ABJ-NM(SK)



- 6 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, with high-quality single-cell weighing system and EC type approval [M]

Features

- 1 Only ABJ-NM: **Automatic internal adjustment** in the case of a change in temperature > 2 °C and time-controlled every 4 hours
- 2 Only ABS-N: **Adjusting program CAL**, external test weights at an additional price, see page 143 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

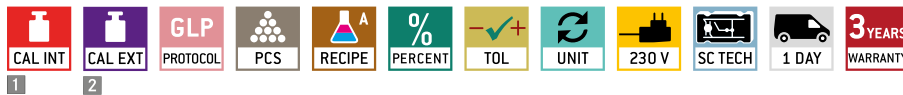
Technical data

- 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

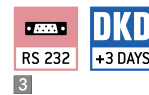
Accessories

- **Protective working cover** standard, can be reordered, KERN ACS-A02, € 30,-
- 3 **Data interface RS-232** interface cable included, KERN ACS-A01, € 75,-
- 4 **Weighing table** to absorb vibrations and oscillations, which would otherwise distort the weighing result, see page 140, KERN YPS-03, € 900,-
- 5 **Set for density determination** of liquids and solids with density $\leq/\geq 1$, details see page 142, KERN YDB-03, € 350,-
- 7 **Ioniser** to neutralise electrostatic charge, see page 140, KERN YBI-01, € 1270,-
- **Suitable printers** see page 138

STANDARD



OPTION



FACTORY






































Model	Weighing range [Max] g	Read-out [d] mg	Verific. value [e] mg	Minimum load [Min] mg	Reproducibility mg	Linearity mg	Options			
							Verification		DKD Calibr. Certificate	
							MI KERN		DKD KERN	€
ABS 80-4N	82	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	82	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).	 Recipe level A: Separate memory for the weight of the tare container and the recipe ingredients (net total).	 Rechargeable battery pack: rechargeable set.
 Adjusting program (CAL): For quick setting 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 displays.	 Mains adapter: 230V/50Hz in standard version for Germany. On request GB, AUS or USA version.
 Memory: Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU.	 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.	 Power supply: integrated in balance. 230V/50Hz in Germany. More standards e. g. GB, AUS, USA on request.
 Data interface RS-232: To connect the balance to a printer, PC or network.		 Strain gauges: Electrical resistor on an elastic deforming body.
 RS 485 data interface: To connect the balance to a printer, PC or other peripheral devices. High tolerance against electromagnetic disturbance.	 Percentage determination: Determining the deviation in % from the target value (100%).	 Tuning fork principle: A resonating body is electromagnetically excited, causing it to oscillate.
 USB data interface: To connect the balance to a printer, PC or other peripheral devices.	 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.	 Electromagnetic force compensation: Coil in a permanent magnet. For the most accurate weighings.
 Bluetooth data interface: To transfer data from the balance to a printer, PC or other peripheral devices.	 Weighing with tolerance range: Upper and lower limiting can be programmed individually, e.g. dosing/sorting and portioning.	 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.	 Vibration-free weighing: (Animal weighing program) Vibrations are filtered out so that a stable weight is obtained.	 Verification possible: The time required for verification is specified in the pictogram.
 Interface for second balance: for direct connection of a second balance.	 Spray and dust protection IPxx: The type of protection is shown by the pictogram. For details see the glossary.	 DKD calibration possible: The time required for DKD calibration is shown in days in the pictogram.
 Network interface: For connecting the scale to an Ethernet network. With KERN products you can also use a universal RS-232/LAN converter.	 Stainless steel: the balance is protected against corrosion.	 Package shipment: The time required to manufacture the product internally is shown in days in the pictogram.
 GLP/ISO record keeping: of weighing data with date, time and identification-no. Only with printers from KERN.	 Suspended weighing: load support with hook on the underside of the balance.	 Pallet shipment: The time required to manufacture the product internally is shown in days in the pictogram.
 Piece counting: Reference quantities selectable. Display can be switched from piece to weight.	 Battery operation: Ready for battery operation. The battery type is specified for each device.	 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 corresponding test weight or the calibration service ? Your KERN specialist dealer will be pleased to assist you.

Your KERN specialist dealer: