

Analytical balance KERN ALS-A · ALJ-A



Precision and price united in harmony, with automatic internal and external adjustment

Features

- 1 only ALJ-A: **Automatic internal adjustment** in the case of a change in temperature > 1,5 °C
- 2 only ALS-A: **Adjusting program CAL** for quick setting of the balance accuracy, external test weights at an additional price, see page 165
- Ergonomically optimised keypad** for left and righthanded users
- Large glass draught shield** with 3 sliding doors for easy access to the items being weighed
- Compact size**, practical for small spaces
- Percentage determination**: makes it possible to store a given weight value (100 %) and to determine deviations from this target value
- Weighing with tolerance range**, ideal for portioning division, dispensing, grading

Technical data

- Backlit LCD display, digit height 17 mm
- Weighing plate dimensions, stainless steel, Ø 80 mm
- Overall dimensions (incl. draught shield) WxDxH 210x340x330 mm
- Weighing space WxDxH 160x140x205 mm
- Net weight approx. 5,7 kg
- Permissible ambient temperature 5 °C / 35 °C

Accessories

- 3 **Protective working cover**, KERN ALJ-A01
- Protective dust cover**, KERN ABS-A08
- Set for density determination** of liquids and solids with density ≤ 1 , details see page 161, KERN YDB-03
- 3 **Ioniser** to neutralise electrostatic charge, see page 162, KERN YBI-01
- 4 **Weighing table** to absorb vibrations and oscillations, which would otherwise distort the weighing result, see page 162, KERN YPS-03
- Suitable printers** and further, extensive accessories from page 157 ff.

STANDARD



OPTION











































FACTORY



Model	Weighing range [Max] g	Readout [d] mg	Verification value [e] mg	Reproducibility mg	Linearity mg	Options				
						Verification		DAkkS Calibr. Certificate		
						MT KERN		DAkkS KERN		
ALS 160-4A	160	0,1	-	0,1	± 0,3	-		963-101		
ALS 250-4A	250	0,1	-	0,1	± 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.										
ALJ 160-4AM	160	0,1	1	0,2	± 0,3	965-201		963-101		
ALJ 250-4AM	250	0,1	1	0,2	± 0,3	965-201		963-101		
ALJ 310-4A	310	0,1	-	0,1	± 0,3	-		963-101		

KERN Pictograms

 Internal adjusting: Quick setting up 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).	 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 B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.	 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 C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation functions.	 Rechargeable battery pack: Rechargeable set.
 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, AUS or USA 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. Additional convenient functions, such as barcode and back calculation.	 Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 USB data interface: To connect the balance to a printer, PC or other peripherals.	 Strain gauges: Electrical resistor on an elastic deforming body.	 Tuning fork principle: 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 %).	 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.	 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.	 Vibration-free weighing: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.	 DAkkS calibration possible: 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. For details see the glossary.	 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, see "Accessories"	 Stainless steel: The balance is protected against corrosion.	 Warranty: The warranty period is shown in the pictogram.
 Piece counting: Reference quantities selectable. Display can be switched from piece to weight.		

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.

Your KERN specialist dealer:

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 6 t
- DAkkS 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
- DAkkS calibration certificates in the following languages D, GB, F, I, E, NL