Analytical balance KERN AET

PREMIUM ★★★

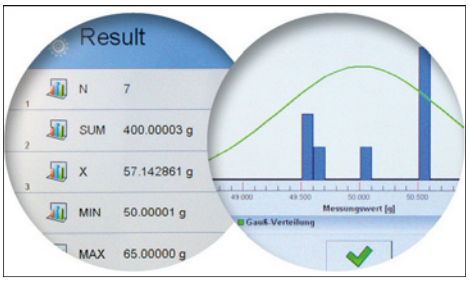
KERN AET [d] = 0,01 mg

KERN AET [d] = 0,1 mg

State-of-the-art premium touchscreen analytical balance with the complete range of functions for demanding processes

Intuitive pipette calibration in accordance with ISO 8655: The user is guided through the pipette calibration procedure step by step, in accordance with the requirements of the norm. This helps to ensure that the pipetting volumes are correct and minimises the risks in daily pipetting work

Convenient recipe-weighing: complete recipes with all recipe ingredients and associated target values, names, tolerances, tare weights etc. can be stored. If there is an excess amount of one recipe ingredient the practical back calculation function automatically calculates the new target weights of the other ingredients



Statistical function for statistical analysis of series of measurements. Graphic display of measurements can be used by the operator to check and evaluate the results

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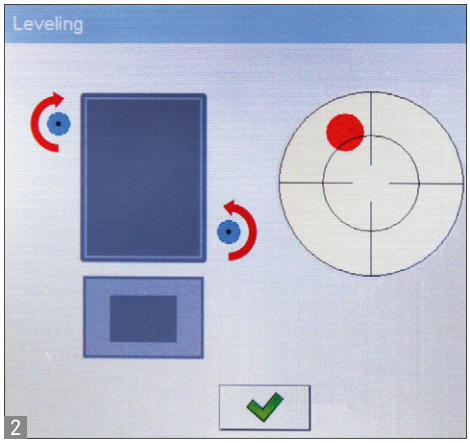

Features

- **Intuitive operation, increases efficiency and saves costs:** Easy entering of item data at the PC, call up of items on the balance using the connected 1 barcode or RFID scanner, output of weighing data using the large or second display or control outputs, data transfer to the PC, printer or alibi memory.
- **Individual user settings can be stored**
  - User name and number
  - Password
  - Menu language
  - User profile
  - Additional guest mode for users without log-in
  - Authorisations, e.g. capture or modification of a recipe only with authorisation, recipe weighing can be carried out by the user
- **Best-before dates** can be stored and printed for each item
- **Difference calculation:** Weighing a sample before and after a machining process and automatic output of the difference value
- **Multiplier function:** recipes and their ingredients can be multiplied at will at the press of a button, which is ideal for the production of larger containers, bulk packs etc.
- **Enormous database (1 GB)** for thousands of weighing results, items, recipes, recipe ingredients, container weights, user data etc.
- **Alibi memory:** paperless archive of weighing results, see also page 11
- 2 **Electronic level indicator** continuously checks the position of the balance, sounds an alarm when the device is out of balance and gives visual instructions on how to correct the situation
- 3 **High level of process reliability:** you can define limit values for selected parameters, such as, for example, temperature, levelling, minimum load, adjustment, etc. When the value falls outside these limits, a warning message will be issued and this can be stored with the measuring result
- **Grid weighing pan and hook for suspended weighing** as standard
- **For further features, see page 7**

Technical data

- Backlit and touch-sensitive LCD display with digit height 21 mm, screen diagonal 5,7" (approx. 145 mm), WxH 115x86 mm. Dimensions of display device WxDxH 215x156x71 mm
- Weighing plate dimensions, stainless steel, Ø 85 mm
- Dimensions housing WxDxH on all models with
  [d] = 0,01 mg: 573x348x217 mm
  [d] = 0,1 mg: 348x360x217 mm
- Weighing space WxDxH 168x160x225 mm
- Permissible ambient temperature 18 °C / 30 °C

Accessories

- **Protective working cover** over the display device, standard, can be retrofitted, suitable for the series AET, PET, ILT, KERN ILT-A02
- **Protective dust cover,** KERN ABS-A08
- **RS-232 barcode scanner,** hand-held version, dimensions WxDxH 152x84x63 mm, details see page 163, KERN PET-A05
- **USB barcode scanner,** hand-held version, dimensions WxDxH 152x84x63 mm, details see page 163, KERN PET-A09
- **USB keyboard** for easy capture of items, descriptions etc., dimensions WxDxH 440x128x24 mm, details see page 164, KERN PET-A06
- **Second display,** dimensions WxDxH 150x33x80 mm, details see page 164, KERN PET-A03
- **Direct thermal label printer,** software for easy editing of (adhesive) labels included, for details see page 163, KERN PET-A13
- **Thermal transfer and direct thermal label printer,** software for easy editing of (adhesive) labels included, for details see page 163, KERN PET-A14
- **Software for database management,** for convenient maintenance of item data at the PC. Data transfer to the balance using the interface cable (see page 158), details see page 163, KERN PET-A01
- **Set for density determination** of liquids and solids, as well as porous materials (soaked in oil) ≤/≥ 1. For details see page 161. KERN YDB-03
  The internal density determination software in the balance takes you through the process, step by step, and shows the density on the display. You can also use a pycnometer

STANDARD

CAL INT · MEMORY · RS 232 · USB · SWITCH · LAN · GLP INTERN · PCS · RECIPE · PERCENT · UNIT · TOL · MOVE · UNDER · 230 V · FORCE · 1 DAY · 3 YEARS WARRANTY

OPTION: DAkkS +3 DAYS

FACTORY: M +3 DAYS

Model KERN	Weighing range [Max] g	Readout [d] mg	Verification value [e] mg	Minimum load [Min] mg	Reproducibility mg	Linearity mg		Options Verification MID KERN		DAkkS Calibr. Certificate DAkkS KERN	
AET 500-4	510	0,1	–	–	0,2	± 0,5	↓	–		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].											
AET 200-5DM	82 | 220	0,01 | 0,1	1	1	0,04 | 0,1	± 0,1 | 0,2	↓	965-201		963-101	
AET 100-5M	100	0,01	1	1	0,05	± 0,1	↓	965-201		963-101	
AET 200-4NM	220	0,1	1	10	0,2	± 0,3	↓	965-201		963-101	

↓ Price reduction

KERN Pictograms

Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven).

Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required.

Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.

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 peripherals. High tolerance against electromagnetic disturbance.

USB data interface: To connect the balance to a printer, PC or other peripherals.

Bluetooth data interface: To transfer data from the balance to a printer, PC or other peripherals.

WLAN data interface: To transfer data from the balance to a printer, PC or other peripherals.

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 use a universal RS-232/LAN converter.

GLP/ISO log: The balance displays the weight, date and time, regardless of a printer connection.

GLP/ISO log: With weight, date and time. Only with KERN printers, see "Accessories"

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 display.

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.

Totalising level A: The weights of similar items can be added together and the total can be printed out.

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.

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 values can be programmed individually for e.g. dosing, sorting and portioning.

Vibration-free weighing: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.

Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram. For details see the glossary.

ATEX explosion protection: Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.

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 EU. On request GB, AUS or USA version available.

Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or 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 inside 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.

DAkkS calibration possible: The time required for DAkkS calibration is shown in days in the pictogram.

Package shipment: The time required for internal shipping preparations is shown in days in the pictogram.

Pallet shipment: The time required for internal shipping preparations 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 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 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

Your KERN specialist dealer: