Analytical balance KERN AET

KERN AET [d] = 0,01 mg

PREMIUM ★★★

KERN AET [d] = 0,1 mg

Note for information on further useful functions for this range, please see pages 6 and 7

Premium touchscreen analytical balance with the complete range of functions for demanding processes

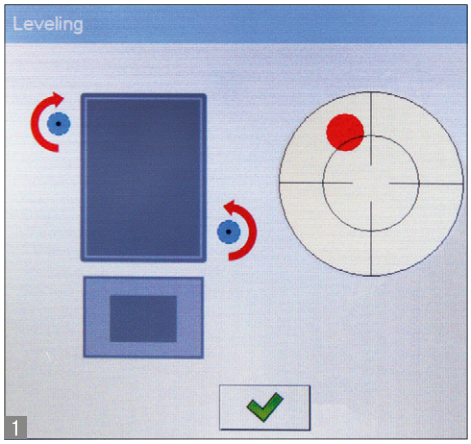
Software supported pipette calibration in accordance with ISO 8655: The user is guided through the pipette calibration procedure step by step, in accordance with the requirements of the norm. This helps to ensure that the pipetting volumes are correct and minimises the risks in daily pipetting work

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

Modes
① Weighing
② Piece counting
③ Checkweighing
④ Dispensing
⑤ Percentage determination
⑥ Density determination
⑦ Animal weighing
⑧ Recipe weighing
⑨ Statistical function
⑩ Pipette calibration
⑪ Differential weighing
⑫ Statistical Quality Control (SQC)

Functions
- Capacity display, with ① - ⑫
- Dispensing aid, with ④, ⑤
- Net/gross display, permanent, with ① - ⑫
- Variable reference quantity, with ②
- Automatic reference optimisation, with ②
- PRE-TARE numerical or from the memory unit, with ① - ⑫
- Input of item or batch description, operator etc., with ① - ⑫
- Freely programmable weighing unit, e.g. display direct in special units such as length of thread g/m, grammage g/m², or similar, with ① - ⑫
- Date/time, with ① - ⑫
- Statistical function, as stand-alone application
- GLP printout, with ① - ⑫
- Individual printout configuration, with ① - ⑫

Analytical balance KERN AET



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 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 by those with authorisation, recipe weighing can be carried out by the user
- **Best-before dates** can be stored and printed for each item
- **Difference determination:** 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 page 214
- 1 **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
- 2 **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
- 3 only AET 200-5DM: **Grid weighing pan, metal draught shield and hook for suspended weighing** as standard
- 4 only AET-NM/DAM:
  - WLAN data interface to transfer data from the balance to a printer, PC or other peripheral devices
  - Enormous database (8 GB)
  - Faster Dual-Core Processor (2 x 1 GB)

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: 348x540x217 mm
  [d] = 0,1 mg: 160x168x225 mm
- Weighing space WxDxH 168x160x225 mm
- Permissible ambient temperature 18 °C / 30 °C

Accessories

- **Protective working cover** over the display device, standard. Can be re-ordered, suitable for the series AET, PET, ILT, scope of delivery: 5 items, KERN ILT-A02S05
- **Protective dust cover**, for models AET 500-4 and AET 200-4NM, KERN ABS-A08
- **RS-232 barcode scanner**, hand-held version, dimensions WxDxH 152x84x63 mm, for details see page 184, KERN PET-A05
- **USB barcode scanner**, hand-held version, dimensions WxDxH 152x84x63 mm, for details see page 184, KERN PET-A09
- **USB keyboard** for easy capture of items, descriptions etc., dimensions WxDxH 440x128x24 mm, for details see page 187, KERN PET-A06
- **Second display**, dimensions WxDxH 150x33x80 mm, for details see page 184, KERN PET-A03
- **Direct thermal label printer**, software for easy editing of (adhesive) labels included, for details see page 184, KERN PET-A13
- **Thermal transfer and direct thermal label printer**, software for easy editing of (adhesive) labels included, for details see page 184, 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 180), for details see page 184, KERN PET-A01
- **Set for density determination** of liquids and solids ≤/≥ 1. The internal density determination software in the balance takes you through the process, step by step, and shows the density on the display. For details see page 183, KERN YDB-03

STANDARD

CAL INT · MEMORY · ALIBI · RS 232 · USB · WLAN 4 · SWITCH · LAN · GLP INTERN · PCS · RECIPE · PERCENT · UNIT · TOL · MOVE · UNDER · MULTI · FORCE · 1 DAY · 3 YEARS WARRANTY

OPTION

DAkkS +3 DAYS

Model KERN	Weighing range [Max] g	Readout [d] mg	Verification value [e] mg	Minimum load [Min] mg	Repro-ducibility mg	Linearitäy mg		Options Verification MI KERN		DAkkS Calibr. Certificate DKD 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 200-5DAM	82 | 220	0,01 | 0,1	–	–	0,04 | 0,1	± 0,1 | 0,2		-	-	963-101	
AET 100-5AM	100	0,01	–	–	0,05	± 0,1		-	-	963-101	
AET 200-4NM	220	0,1	1	10	0,2	± 0,3		965-201		963-101	

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.

Alibi memory: Electronic archiving of weighing results, complying with the 2009/23/EC standard.

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.

Wireless data transfer: between the weighing unit and the evaluation unit using an integrated radio module.

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.

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, adjustment of recipe when dosages are exceeded, multiplier function, barcode.

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, adjustment of recipe when dosages are exceeded, multiplier function, barcode recognition.

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.

Hold function: (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.

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.

Universal mains adapter: with universal input and optional input socket adapters for
A) EU, GB
B) EU, GB, CH, USA
C) EU, GB, CH, USA, AUS

Mains adapter: 230V/50Hz in standard version for EU. On request GB, USA or AUS version available.

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

Weighing principle: Strain gauge Electrical resistor on an elastic deforming body.

Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate.

Weighing principle: Electromagnetic force compensation Coil inside a permanent magnet. For the most accurate weighings.

Weighing principle: 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 (DKD): 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.

KERN – 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 50 t
- DAkkS calibration of weights in the range of 1 mg – 2500 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, PL

Your KERN specialist dealer: