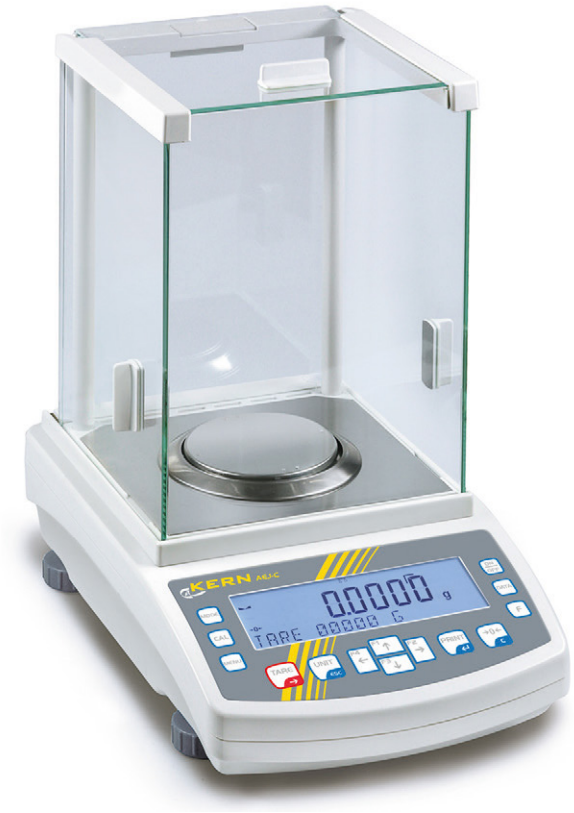
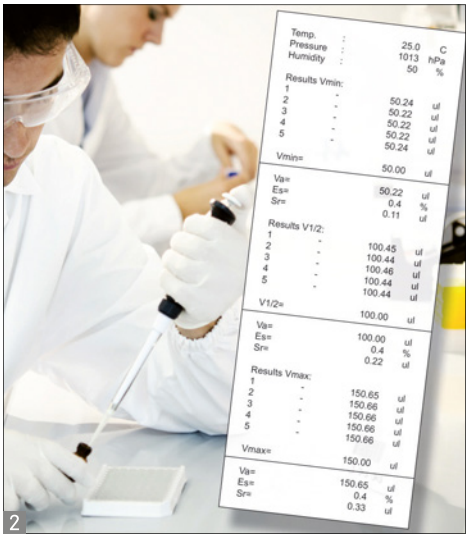
# Analytical balance KERN AES-C · AEJ-CM






## Compact high-end analytical balance with useful pipette calibration program and alibi memory

### *Features*

- 1 only AEJ-CM: **Automatic internal adjustment** in the case of a change in temperature > 0,8 °C and time-controlled every 3 hours
- 2 **Intuitive pipette calibration function** to ensure data integrity and to minimise the risks in the daily work with your pipettes
- Higher weighing speed by switching off the last digit
- **Modern all glass draught wind shield** for ideal visibility of the weighing object
- **Dispensing mode:** By pressing one key you can set all relevant parameters for dispensing
- **Alibi memory:** Paperless archiving of up to 100,000 weighing results. Additional information on page 11.
- **Note:** For weighings where verification is mandatory, and which are to be analysed and processed by a PC, the legislative body requires electronic archiving using a verifiable, non-manipulatable data memory
- **Internal memory** for up to 999 weighing results, 1000 items or recipe ingredients, 100 container weights, 100 users

### *Technical data*

- Large backlit LCD display, digit height 17 mm
- Weighing plate dimensions, stainless steel, Ø 85 mm
- Overall dimensions WxDxH 206x335x335 mm
- Weighing space WxDxH 168x160x225 mm
- Net weight approx. 5 kg
- Permissible ambient temperature 18 °C / 30 °C

### *Accessories*

- **Protective working cover**, standard. Can be re-ordered, scope of delivery: 5 items, KERN ALS-A02S05
- **Set for density determination** of liquids and solids with density ≤/≥ 1, Step-by-step user guidance and calculated density shown immediately on the display. For interesting facts about density determination see page 214, KERN YDB-03
- only AEJ-CM: **Alibi memory software** for viewing and saving data from the alibi memory onto a PC connected to the system, KERN PET-A16
- **WLAN interface** for wireless connection to networks and WLAN capable devices, such as tablets, laptops or smartphones, must be ordered at purchase, please ask for delivery time, KERN PLJ-A06
- **Suitable printers** see page 177 ff.

STANDARD

CAL INT (1) · CAL EXT · MEMORY · ALIBI (only AEJ-CM) · RS 232 · USB · GLP INTERN · PCS · RECIPE · PERCENT · UNIT · TOL · UNDER · MULTI · FORCE · 1 DAY · 3 YEARS WARRANTY

OPTION: DAkkS +3 DAYS

FACTORY: WLAN · +3 DAYS (only AEJ-CM)

| Model<br>KERN | Weighing range [Max]<br>g | Readout [d]<br>mg | Verification value [e]<br>mg | Minimum load [Min]<br>mg | Repro-ducibility<br>mg | Linearity<br>mg | | Options: Verification MI KERN | Options: Verification | Options: DAkkS Calibr. Certificate DKD KERN | Options: DAkkS Calibr. Certificate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **AES 100-4C** | 160 | 0,1 | – | – | 0,2 | ± 0,2 | | – | – | 963-101 | |
| **AES 200-4C** | 220 | 0,1 | – | – | 0,2 | ± 0,2 | | – | – | 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. | | | | | | | | | | | |
| **AEJ 200-5CM** | 82 \| 220 | 0,01 \| 0,1 | 1 \| 1 | 1 | 0,04 \| 0,1 | ± 0,1 \| 0,2 | | 965-201 | | 963-101 | |
| **AEJ 100-4CM** | 160 | 0,1 | 1 | 10 | 0,2 | ± 0,3 | | 965-201 | | 963-101 | |
| **AEJ 200-4CM** | 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: