# Analytical balances KERN AES-C/AEJ-C (SK)




NEW



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**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 (alibi memory).

## 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 draft wind shield** for optimal visibility of the weighing object
- **Dispensing mode:** By pressing one key you can set all relevant parameters for this dispensing process
- **Alibi memory:** Paperless archiving of up to 100,000 weighing results. Additional information on page 13
- **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
- Dimensions of weighing plate, stainless steel, Ø 85 mm
- Overall dimensions WxDxH 206x335x335 mm
- Weighing space WxDxH 168x160x225 mm
- Net weight approx. 5,4 kg
- Permissible ambient temperature 18 °C / 30 °C

### *Accessories*

- Protective working cover, standard, can be reordered, KERN ALS-A02
- **Set for density determination** of liquids and solids with density ≤/≥1, details see page 142. Step-by-step user guidance, as well as the calculated density shown immediately on the display, KERN YDB-03
- **Ioniser** to neutralise electrostatic charge, see page 140, KERN YBI-01
- **Weighing table** to absorb vibrations and oscillations, which would otherwise distort the weighing result, see page 140, KERN YPS-03
- **Suitable printers** see page 138

STANDARD

CAL INT (1) | CAL EXT | MEMORY | RS 232 | USB | GLP PROTOCOL | PCS | % PERCENT | UNIT | TOL | UNDER | 230 V | NTS FORCE | 1 DAY | 3 YEARS WARRANTY

OPTION

DKD +3 DAYS

FACTORY

M +3 DAYS only AEJ-CM

| Model<br>KERN | Weighing range [Max]<br>g | Readout [d]<br>mg | Verific. value [e]<br>mg | Minimum load [Min]<br>mg | Repro-ducibility<br>mg | Linearity<br>mg | | Options<br>Verification<br>MI KERN | | DKD Calibr. Certificate<br>DKD KERN | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **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** | 80 \| 220 | 0,01 \| 0,1 | 1 \| 1 | 1 | 0,04 \| 0,1 | ± 0,1 \| 0,2 | | auf Anfrage | | 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

CAL INT — **Internal adjusting (CAL):** Quick setting of the balance's accuracy with internal adjusting weight (motordriven).

CAL EXT — **Adjusting program (CAL):** For quick setting of the balance's accuracy. External adjusting weight required.

MEMORY — **Memory:** Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU.

RS 232 — **Data interface RS-232:** To connect the balance to a printer, PC or network.

RS 485 — **RS 485 data interface:** To connect the balance to a printer, PC or other peripheral devices. High tolerance against electromagnetic disturbance.

USB — **USB data interface:** To connect the balance to a printer, PC or other peripheral devices.

BT — **Bluetooth data interface:** To transfer data from the balance to a printer, PC or other peripheral devices.

SWITCH — **Control outputs (optocoupler, digital I/O):** to connect relays, signal lamps, valves, etc.

DUAL — **Interface for second balance:** for direct connection of a second balance.

LAN — **Network interface:** For connecting the scale to an Ethernet network. With KERN products you can also use a universal RS-232/LAN converter.

GL PROTOCOL — **GLP/ISO record keeping:** of weighing data with date, time and identification-no. Only with printers from KERN.

PCS — **Piece counting:** Reference quantities selectable. Display can be switched from piece to weight.

A RECIPE — **Recipe level A:** Separate memory for the weight of the tare container and the recipe ingredients (net total).

B RECIPE — **Recipe level B:** Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through displays.

C RECIPE — **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.

PERCENT — **Percentage determination:** Determining the deviation in % from the target value (100%).

UNIT — **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.

TOL — **Weighing with tolerance range:** Upper and lower limiting can be programmed individually, e.g. dosing/sorting and portioning.

MOVE — **Vibration-free weighing:** (Animal weighing program) Vibrations are filtered out so that a stable weight is obtained.

IP — **Spray and dust protection IPxx:** The type of protection is shown by the pictogram. For details see the glossary.

INOX — **Stainless steel:** the balance is protected against corrosion.

UNDER — **Suspended weighing:** load support with hook on the underside of the balance.

BATT — **Battery operation:** Ready for battery operation. The battery type is specified for each device.

ACCU — **Rechargeable battery pack:** rechargeable set.

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

230 V — **Power supply:** integrated in balance. 230V/50Hz in Germany. More standards e. g. GB, AUS, USA on request.

DMS — **Strain gauges:** Electrical resistor on an elastic deforming body.

T-FORK — **Tuning fork principle:** A resonating body is electromagnetically excited, causing it to oscillate.

FORCE — **Electromagnetic force compensation:** Coil in a permanent magnet. For the most accurate weighings.

SC TECH — **Single cell technology:** Advanced version of the force compensation principle with the highest level of precision.

+3 DAYS — **Verification possible:** The time required for verification is specified in the pictogram.

DKD +3 DAYS — **DKD calibration possible:** The time required for DKD calibration is shown in days in the pictogram.

DAYS — **Package shipment:** The time required to manufacture the product internally is shown in days in the pictogram.

DAYS — **Pallet shipment:** The time required to manufacture the product internally is shown in days in the pictogram.

3 YEARS WARRANTY — **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 corresponsing test weight or the calibration service ? Your KERN specialist dealer will be pleased to assist you.

# Your KERN specialist dealer: