

Analytical balances KERN ADB · ADJ











The price leader in analytical balances, now also with internal adjustment

Features

- · NEW KERN ADJ: Automatic internal adjustment in the case of a change in temperature ≥ 2 °C or timecontrolled every 3 h, guarantees high degree of accuracy and makes the balance independent of its location of use
- · KERN ADB: Adjusting program CAL for quick setting of the balance accuracy using an external test weight
- II ADB/ADJ 600-C3: Compact, space-saving carat balance with a readout of 0.001 ct and a weighing capacity of 600 ct. The high level of accuracy saves hard cash wherever you are weighing valuable precious stones
- · Level indicator and foot screws to level the balance precisely, fitted as standard, to give the most accurate weighing results
- · Large glass draught shield with 3 sliding doors for easy access to the items being weighed.
- Compact size, practical for small spaces
- Simple and convenient 6-key operation

Technical data

- · Large backlit LCD display, digit height 16 mm
- Dimensions weighing surface, stainless steel, Ø 90 mm
- · Overall dimensions (incl. draught shield) $W \times D \times H$
- KERN ADB/ADJ: 230×310×330 mm KERN ADB-C/ADJ-C: 205×310×210 mm
- Weighing space W×D×H KERN ADB/ADJ: 170×160×205 mm KERN ADB-C/ADJ-C: 170×160×110 mm
- Permissible ambient temperature 10 °C/30 °C

Accessories

- 2 lonizer to neutralise electrostatic charge, KERN YBI-01A
- I Precious stones plate, aluminium with practical spout, W×D×H 83×66×23 mm, KERN AEJ-A05
- 4 Weighing table to absorb vibrations and oscillations, which would otherwise distort the weighing result, KERN YPS-03
- · Minimum weight of sample, smallest weight to be weighed, depending on the required process accuracy, only in combination with a DAkkS calibration certificate, KERN 969-103
- · Further details, plenty of further accessories and suitable printers see Accessories

963-101

STANDARD











120 g | 600 ct







0,1 mg | 0,001 ct





Readability Model Weighing capacity Reproducibility Net weight Option Linearity DAkkS Calibr. Certificate [Max] [d] approx. **DAkkS KERN** mg mg mg kg g KERN ADB 100-4 120 0.1 0.2 ± 0,4 4.4 963-101 ADB 200-4 963-101 210 0.1 0.2 $\pm 0,4$ 4.4 ADB 600-C3 ₩ 0,1 mg | 0,001 ct 120 g | 600 ct 0,2 mg | 0,002 ct \pm 0,4 mg | \pm 0,004 ct 963-101 3,8 120 0,2 5 963-101 0.1 ± 0.4 ADJ 100-4 ADJ 200-4 210 0,1 0,2 $\pm 0,4$ 5 963-101

0,2 mg | 0,002 ct \pm 0,4 mg | \pm 0,004 ct

KERN BALANCES & TEST SERVICES CATALOGUE 2020

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



Easy Touch:

Suitable for the connection, data transmission and control through PC, tablet or smartphone



Memory:

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



Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU 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. Suitable for data transfer over large distances. Network in bus topology is possible



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.



Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements



Interface for second balance:

For direct connection of a second balance



Network interface:

For connecting the scale to an Ethernet network



Wireless data transfer:

between the weighing unit and the evaluation unit using an integrated radio module

*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Other trademarks and trade names are those of their respective owners.

KCP PROTOCOL

KERN Communication Protocol (KCP):

It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems



GLP/ISO log:

The balance displays serial number, user ID, 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:

The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



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



Totalising level A:

The weights of similar items can be added together and the total can be printed out



Percentage determination:

Determining the deviation in % from the target value (100 %)



Weighing units:

Can be switched to e.g. nonmetric units at the touch of a key. See balance model. Please refer to KERN's website for more details



Weighing with tolerance range:

(Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model



MOVE

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.



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, CH, GB; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS



Mains adapter:

230V/50Hz in standard version for EU, CH. 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 gauges

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:

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

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 - 2500 kg. In combination with a DAkkS calibration certificate the best pre-requisite for proper

The KERN DAkkS calibration laboratory today is one of the most modern and best-equipped DAkkS calibration laboratories for balances, test weights and force-measure-

ment 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.

. . .

- 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
- Volume determination and measuring of magnetic susceptibility (magnetic characteristics) for test weights
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
 DAkkS calibration certificates in the following languages DE, GB, FR, IT, ES, NL, PL

Your KERN specialist dealer:

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Conformity evaluation and reverification of balances and test weights