Analytical Balances KERN ADB · ADJ


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The price leader in analytical balances, with internal or external adjustment

Features

- 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 at an additional price, see *Test Weights*
- Glass draught shield with 3 sliding doors for easy access to the items being weighed. standard
- 1 ADB 600-C3/ADJ 600-C3: Compact, space-saving carat balances with a readout of 0.001 ct and a weighing range of 600 ct. The high level of accuracy saves hard cash wherever you are weighing valuable precious stones
- Level indicator and levelling feet for precise levelling of the scale, fitted as standard, to give the most accurate weighing result
- Simple and convenient 6-key operation

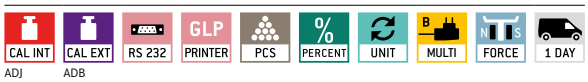
Technical data

- Large backlit LCD display, Digit height 16 mm
- Dimensions weighing surface, stainless steel, ø 90 mm
- Weighing space W×D×H
  KERN ADB-C/ADJ-C: 170×160×110 mm
  KERN ADB/ADJ: 170×160×205 mm
- Permissible ambient temperature 10 °C/30 °C

Accessories

- 2 Set for density determination of liquids and solids with density ≤/≥ 1, the density is indicated directly on the display, KERN YDB-03
- 3 Ioniser to neutralise electrostatic charge, KERN YBI-01A
- 4 Gemstones plate, aluminium with practical spout, W×D×H 130×80×30 mm, KERN AEJ-A05
- 5 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
- Equipment qualification: compliant qualification concept which includes the following validation services, Installation Qualification (IQ), Operating Qualification (OQ)
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD



ADJ ADB

OPTION

Model KERN	Weighing capacity [Max] g	Readability [d] mg	Reproducibility mg	Linearity mg	Overall dimensions W×D×H mm	Net weight kg	Options **DAkkS Calibr. Certificate** DAkkS KERN
ADB 100-4	120	0,1	0,2	± 0,4	230×310×330	4,4	963-101
ADB 200-4	220	0,1	0,2	± 0,4	230×310×330	4,4	963-101
ADB 600-C3 ◈	600 ct	0,001 ct	0,002 ct	± 0,004 ct	230×310×210	3,8	963-101
ADJ 100-4	120	0,1	0,2	± 0,4	230×310×330	5,0	963-101
ADJ 200-4	220	0,1	0,2	± 0,4	230×310×330	5,0	963-101
ADJ 600-C3 ◈	600 ct	0,001 ct	0,002 ct	± 0,004 ct	230×310×210	4,6	963-101

BALANCES & TEST SERVICE 2024

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

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

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.

KERN Universal Port (KUP)
allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WIFI, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort

RS-232 Data interface
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

WIFI 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

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 intern
The balance displays weight, date and time, independent of a printer connection

GLP/ISO log Printer
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

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. 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

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

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 plug-in power supply
with universal input and optional input socket adapters for
A) EU, CH, GB
B) EU, CH, GB, US
C) EU, CH, GB, US, AUS

Plug-in power supply
230V/50Hz in standard version for EU, CH.
On request GB, USA or AUS version available

Integrated power supply unit
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

Conformity Assessment
The time required for conformity assessment is specified in the pictogram

DAkkS calibration possible (DKD)
The time required for DAkkS calibration is shown in days in the pictogram

Factory calibration (ISO)
The time required for Factory 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

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