Bench scales KERN ECE-N · ECB-N

Plain, mobile, uncomplicated

Features

- 2 High mobility: Battery operation, compact, lightweight construction, recessed grips on the underside and low weight make this balance ideal for use in several locations
- Particularly large weighing plate
- Very fast display: steady weight values within 2 s
- Simple and convenient 2-key operation

Technical data

- KERN ECB-N: Large backlit LCD display, digit height 21 mm
- KERN ECE-N: Large LCD display, digit height 21 mm
- Dimensions weighing surface W×D 320×260 mm
- Weighing plate material
  1 KERN ECE-N: plastic
  KERN ECB-N: stainless steel, see larger picture
- Overall dimensions W×D×H 320×300×60 mm
- Optional battery operation, 6×1.5 V AA, standard, operating time up to 100 h, AUTO-OFF function to preserve the battery
- Net weight
  KERN ECE-N: approx. 1,6 kg
  KERN ECB-N: approx. 2,6 kg
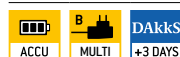- Permissible ambient temperature 5 °C/35 °C

Accessories

- Internal rechargeable battery pack, operating time up to 30 h without backlight, charging time approx. 10 h, KERN PCB-A01
- Rechargeable battery pack external, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KS-A01
- Tare pan made from stainless steel. Ideal for weighing loose small parts, fruit, vegetables, etc., KERN RFS-A02
- External universal mains adapter, with universal input and optional input socket adapters for EU, GB, USA, KERN YKA-03N
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD

| CAL EXT | BATT | DMS | 1 DAY |

OPTION

| ACCU | B MULTI | DAkkS +3 DAYS |

Model	Weighing capacity	Readability	Reproducibility	Linearity		Option
						DAkkS Calibr. Certificate
	[Max]	[d]				**DAkkS**
KERN	kg	g	g	g		KERN
ECE 10K-3N	10	5	5	± 20		963-128
ECE 20K-2N	20	10	10	± 40		963-128
ECE 50K-2N	50	20	20	± 80		963-128
ECB 10K-3N	10	5	5	± 20		963-128
ECB 20K-2N	20	10	10	± 40		963-128
ECB 50K-2N	50	20	20	± 80		963-128

Pictograms

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

Adjusting program CAL:
For quick setting up of the balance's accuracy. External adjusting weight required
CAL EXT

Easy Touch:
Suitable for the connection, data transmission and control through PC, tablet or smartphone.
ET

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

Alibi memory:
Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard
ALIBI

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

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
RS 485

USB data interface:
To connect the balance to a printer, PC or other peripherals
USB

Bluetooth* data interface:
To transfer data from the balance to a printer, PC or other peripherals
BT

WiFi data interface:
To transfer data from the balance to a printer, PC or other peripherals
WIFI

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

Analogue interface:
to connect a suitable peripheral device for analogue processing of the measurements
ANALOG

Interface for second balance:
For direct connection of a second balance
DUAL

Network interface:
For connecting the scale to an Ethernet network
LAN

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
KCP PROTOCOL

GLP/ISO log:
The balance displays serial number, user ID, weight, date and time, regardless of a printer connection
GLP INTERN

GLP/ISO log:
With weight, date and time. Only with KERN printers
GLP PRINTER

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

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 A

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

Totalising level A:
The weights of similar items can be added together and the total can be printed out
SUM A

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

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
UNIT

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
TOL

Hold function:
(Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value
MOVE

Protection against dust and water splashes IPxx:
The type of protection is shown in the pictogram
IP

Suspended weighing:
Load support with hook on the underside of the balance
UNDER

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

Rechargeable battery pack:
Rechargeable set
ACCU

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
MULTI

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

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

Weighing principle: Strain gauges:
Electrical resistor on an elastic deforming body
DMS

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

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

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

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

DAkkS calibration possible (DKD):
The time required for DAkkS calibration is shown in days in the pictogram
DAkkS +3 DAYS

Factory calibration (ISO):
The time required for Factory calibration is shown in days in the pictogram
ISO +4 DAYS

Package shipment:
The time required for internal shipping preparations is shown in days in the pictogram
1 DAY

Pallet shipment:
The time required for internal shipping preparations is shown in days in the pictogram
2 DAYS

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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 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
- 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, EN, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

Your KERN specialist dealer: