

Bench scale KERN FCE-N









# Entry-level bench scale - mobile, practical, lightweight

## **Features**

- Simple and convenient 2-key operation
- Very fast display: steady weight values within 3 s
- 11 Ideal as a compact letter and parcel scale, especially where space is limited
- 2 Ideal as a grading, comissioning or simple checkweighing scale in production or dispatch
- · Protective working cover included with delivery

## **Technical data**

- Large LCD display, digit height 25 mm
- Dimensions weighing surface, plastic, W×D 252×228 mm
- Overall dimensions W×D×H 270×323×110 mm
- Optional battery operation, 9 V block not included in scope of delivery, operating time up to 12 h, AUTO-OFF function to preserve the battery
- Net weight approx. 2,4 kg
- Permissible ambient temperature 5 °C/35 °C

## Accessories

- Protective working cover, scope of delivery: 5 pieces, KERN FCB-A02S05
- B Stainless steel weighing plate, robust, removable, for easy cleaning, KERN FCE-A01
- Internal rechargable battery pack, operating time up to 20 h, without backlight, charging time approx. 10 h, KERN FCB-A01















Model	Weighing capacity	Readability	Reproducibility	Linearity		Option	
				-	ĺ	DAkkS Calibr. Certificate	
	[Max]	[d]				DAkkS	
KERN	kg	g	g	g		KERN	
FCE 3K1N	3	1	2	± 3		963-127	
FCE 6K2N	6	2	2	± 4		963-128	
FCE 15K5N	15	5	10	± 15		963-128	
FCE 30K10N	30	10	10	± 30		963-128	



## **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 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.



#### 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 datatransfer 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:

The balance displays serial number, user ID, weight, date and time, regardless of a printer



## 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



## 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.

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## 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, USA; C) EU. CH. GB. USA. 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



## 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



## 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

## **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-

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
- Calibration of force-measuring devices

· Database supported management of checking equipment and reminder service

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: