## **KERN BALANCES & TEST SERVICES CATALOGUE 2019**

## School balance KERN EMB



# Entry level laboratory balance with tremendous weighing performance

## Features

- Simple and convenient 2-key operation
- Tare function facilitates formulation work
- Particularly flat design
- Ready for use: Batteries included
- II Ring-shaped draught shield standard, only for models with weighing plate size II, weighing space Ø×H 96×35 mm
- Hook for underfloor weighing standard
- Note: KERN EMB 500-1BE Black Edition

## **Technical data**

- Large LCD display, digit height 15 mm
- Dimensions weighing surface, plastic, with conductive lacquer

   ∅ 82 mm
- ₿ Ø 105 mm
- 🖸 Ø 150 mm, see larger picture
- · Weighing plate material
- plastic, with conductive lacquerplastic
- Net weight approx. 0,75 kg
- Permissible ambient temperature 5 °C/35 °C

### Accessories

- Stainless steel weighing plate, only for models with weighing plate size 3, KERN EMB-A02
- Stack frame for space-saving storage of precision balances from the KERN EMB range, scope of delivery 5 pieces, for models with housing dimensions W×D×H 170×244×39 mm, KERN EMB-A07 170×244×52 mm, KERN EMB-A09
- External universal mains adapter, with universal input and optional input socket adapters for EU, GB, USA, KERN YKA-03

STANDARD	OPTION					
	UNDER	BATT	DMS	1 DAY		DAkkS +3 Days

Model	Weighing capacity	Readability	Reproducibility	Linearity	Weighing plate	Option
						DAkkS Calibr. Certificate
	[Max]	[d]				DAkkS
KERN	g	g	g	g		KERN
EMB 100-3	100	0,001	0,001	± 0,005	А	963-127
EMB 200-3	200	0,001	0,001	± 0,005	А	963-127
EMB 200-2	200	0,01	0,01	± 0,02	В	963-127
EMB 600-2	600	0,01	0,01	± 0,03	В	963-127
EMB 1000-2	1000	0,01	0,01	± 0,05	C	963-127
EMB 2000-2	2000	0,01	0,01	± 0,05	C	963-127
EMB 500-1	500	0,1	0,1	± 0,2	C	963-127
EMB 500-1BE	500	0,1	0,1	± 0,2	C	963-127
EMB 1200-1	1200	0,1	0,1	± 0,3	C	963-127
EMB 3000-1	3000	0,1	0,1	± 0,3	C	963-127
EMB 6000-1	6000	0,1	0,1	± 0,3	C	963-128
EMB 2200-0	2200	1	1	± 2	C	963-127
EMB 5.2K1	5200	1	1	± 3	C	963-128
EMB 5.2K5	5200	5	5	± 10	С	963-128



QUALITY











## <u>KERN</u>

## **KERN BALANCES & TEST SERVICES CATALOGUE 2019**

KCP

PROTOCOL



## Pictograms

#### Internal adjusting:

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

#### 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 Memory:

#### Balance memory capacity, e.g. for article data, MEMORY

weighing data, tare weights, PLU etc. Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.



• 6534 •

ALIBI

## 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 RS 485 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



ANALOG

### 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<sup>®</sup> 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.

### **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 bestequipped 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.

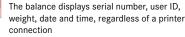
#### Range of services:

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



PCS

GLP/ISO log:



**KERN Communication Protocol (KCP):** 

It is a standardized interface command set for

KERN balances and other instruments, which

parameters and functions of the device. KERN

devices featuring KCP are thus easily integrated

with computers, industrial controllers and other

allows retrieving and controlling all relevant

## GLP/ISO log:

With weight, date and time. Only with KERN PRINTER printers

## **Piece counting:**

Reference quantities selectable. Display can be switched from piece to weight

#### Recipe level A: 4

The weights of the recipe ingredients can be RECIPE 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: ∠**<sup>c</sup>



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



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

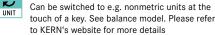


TOL

Percentage determination:

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

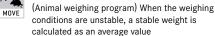
#### Weighing units: S

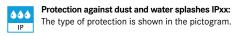


#### Weighing with tolerance range: ○ 3)

(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

#### M-Hold function:





#### 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 BATT specified for each device



INOX

Rechargeable battery pack: Rechargeable set



## Universal mains adapter:

with universal input and optional input socket adapters for A) EU, CH; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS

#### Mains adapter:

230V/50Hz in standard version for EU. On 230 V 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



SC TECH

Μ

+3 DAYS

DAkkS

+3 DAYS

1 DAY

2 DAYS

Your KERN specialist dealer:

#### Weighing principle: Tuning fork: A resonating body is electromagnetically

excited, causing it to oscillate

#### s T compensation FORCE

accurate weighings

Verification possible:

Package shipment:

Pallet shipment:

DAkkS calibration possible:

shown in days in the pictogram

the pictogram

## Weighing principle: Electromagnetic force Coil inside a permanent magnet. For the most

Weighing principle: Single cell technology:

The time required for verification is specified in

Advanced version of the force compensation

principle with the highest level of precision

The time required for DAkkS calibration is

The time required for internal shipping

The time required for internal shipping

preparations is shown in days in the pictogram

preparations is shown in days in the pictogram