## Precision balance KERN EMS





# Entry level model in the low-cost range with large weighing plate

## Features

- Especially suitable for use in schools and universities, for example for biology, chemistry, physics
- Large, shock proof plastic weighing plate
- Particularly flat design
- Ergonomically optimised key pad with large keys and a high-contrast LCD display
- Secure and non-slip positioning with rubber feet
- Adjusting program CAL, external test weights at an additional price, see page 143 ff.
- Draft shield standard, only for models with weighing plate sizes A, weighing space WxDxH 145x145x65 mm

### Technical data

- LCD display, digit height 15 mm
- Dimensions of weighing plate (plastic)
  ▲ Ø 105 mm
- B WxD 160x160 mm, see larger picture
- Dimensions housing WxDxH 200x280x63 mm
- Optional battery operation, battery 9 V Block not standard, operating time up to 40 h, AUTO-OFF function to preserve the battery
- Mains adapter external standard
- Net weight approx. 1,4 kg
- Permissible ambient temperature 5 °C / 35 °C

#### Accessories

• Stainless steel weighing plate, only for models with weighing plate sizes **B**, KERN EMS-A01

STANDARD											
CAL EXT	PCS	% PERCENT		BATT	230 V	DMS	1 DAY	2 <sub>years</sub> warranty	DKD +3 DAYS		

Model	Weighing range	Readout	Repro- ducibility	Linearity	Min. piece weight	Weighing plate	Option DKD Calibr. Certificate
	[Max]	[d]			[Counting]		DKD
KERN	g	g	g	g	g/piece		KERN
EMS 300-3	300	0,001	0,002	± 0,005	0,002	Α	963-127
EMS 3000-2	3000	0,01	0,02	± 0,05	0,02	В	963-127
EMS 6K0.1	6000	0,1	0,1	± 0,3	0,2	В	963-128
EMS 12K0.1	12000	0,1	0,1	± 0,3	0,2	В	963-128
EMS 6K1	6000	1	1	± 3	2	В	963-128
EMS 12K1	12000	1	1	± 3	2	В	963-128

# **KERN Pictograms**



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



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



Memory: Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU.



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 peripheral devices. High tolerance against electromagnetic disturbance.



USB data interface: To connect the balance to a printer, PC or other peripheral devices.



Bluetooth data interface: To transfer data from the balance to a printer, PC or other peripheral devices.



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



Interface for second balance: for direct connection of a second balance.



Network interface: For connecting the scale to an Ethernet network. With KERN products you can also use a universal RS-232/LAN



converter. GLP/ISO record keeping: of weighing data with date, time and identification-no.



Piece counting: Reference quantities selectable. Display can be switched from



Recipe level A: Separate memory for the weight of the tare container and the recipe ingredients (net total).

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



Recipe level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through displays. Additional convenient functions, such as barcode and back calculation functions.



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: Upper and lower limiting can be programmed individually, TOL e.g. dosing/sorting and portioning.

^-₽ Vibration-free weighing: (Animal weighing program) Vibrations are filtered out so that a MOVE stable weight is obtained.

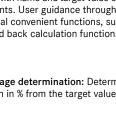
Spray and dust protection IPxx: The type of 666 protection is shown by the pictogram. IP For details see the glossary.

Stainless steel: the balance is protected 1 against corrosion. INOX



Suspended weighing: load support with hook on the underside of the balance.

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





Verification possible: The time required for



DKD calibration possible: The time required for DKD calibration is shown in days in the pictogram.



Package shipment: The time required to manufacture the product internally is shown in days in the pictogram.



manufacture the product internally is shown in days in the pictogram.



Warranty: The warranty period is shown in the pictogram.

## Precision is our business

Only with printers from KERN.

piece to weight.

To ensure the high precision of your balance KERN offers you the the appropriate test weight package for your balance, consisting of the test weight, box and DKD certificate, as proof of ist accuracy ... the best pre-requisite for proper balance calibration.

In the extensive KERN test weight range, you will find test weights in the international OIML error limit classes: E1, E2, F1, F2, M1, M2, M3 with weights from 1 mg - 2000 kg.

The KERN DKD calibration laboratory for electronic balances and weights has been accredited by DKD since 1994 and today is one of the most modern and best-equipped DKD calibration laboratories for balances, test weights and forcemeasurement in Europe. (DKD = German Calibration Service)

Your KERN specialist dealer:

Thanks to the high level of automation, we can carry out DKD calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

#### Range of services:

- DKD calibration of balances with a maximum load of up to 6 t
- DKD calibration of weights in the range of 1 mg 500 kg Database supported management of checking equipment and
- reminder service
- Calibration of force-measuring devices DKD calibration certificates in the following languages

D, GB, F, I, E, NL, PL

Do you have questions about your scale, the corresponsing test weight or the calibration service ? Your KERN specialist dealer will be pleased to assist you.



Pallet shipment: The time required to





DAYS



ACCU

Rechargeable battery pack: rechargeable set.

-C=

T-FORK

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

> Power supply: integrated in balance. 230V/50Hz in Germany. More standards

230 V e. g. GB, AUS, USA on request. Strain gauges: Electrical resistor on an

elastic deforming body. DMS (((U)))

Tuning fork principle: A resonating body is electromagnetically excited, causing it to

N

Electromagnetic force compensation: Coil in a permanent magnet. For the most FORCE accurate weighings.

Single cell technology: Advanced version Ř. ∽ of the force compensation principle with the highest level of precision.

oscillate.

Μ verification is specified in the pictogram.

+3 DAYS

DKD

+3 DAYS