Precision Balances KERN EW-N · EG-N



# The classic balance with robust tuning fork measuring system

# **Features**

- KERN EG: Internal adjustment in the case of a change in temperature and time-controlled at defined intervals, guarantees high degree of accuracy and makes the balance independent of its location of use
- · Stable temperature behaviour
- · Short stabilisation time
- · Shock proof construction
- · High corner load performance
- · Capacity display: A bargraph display lights up to show how much of the weighing range is still available
- · Totalising of pieces when counting
- · Draught shield standard for models with weighing plate size A, weighing space W×D×H 158×130×78 mm

· Protective working cover included with delivery

# **Technical data**

- Large LCD display, digit height 17 mm
- Dimensions weighing surface, stainless steel A Ø 118 mm, see larger picture
  - **B** W×D 170×140 mm **C** W×D 180×160 mm
- · Overall dimensions W×D×H
- **A** 185×235×165 mm **B**, **C** 180×235×75 mm
- A ca. 2,0 kg, B ca. 1,6 kg, C ca. 4,0 kg
- Permissible ambient temperature 10 °C/30 °C











# Accessories

- · Protective working cover, scope of delivery: 5 items, for models with weighing plate size
- A. B KERN EG-A05S05
- C KERN FG-A09S05
- · Internal rechargeable battery pack, operating time up to 12 h with backlight, charging time approx. 12 h, for models with weighing plate size
- A, B KERN EG-A04
- C KERN EG-A06
- 2 Large glass draught shield with 3 sliding doors for easy access to the items being weighed. Weighing space W×D×H 150×140×130 mm, KERN EG-A03
- · Loop for underfloor weighing, for models with weighing plate size
  - A, B KERN EG-A07
  - C KERN EG-A08
- · 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), for details see page 230
- · Further details, plenty of further accessories and suitable printers see Accessories

# STANDARD





































Model KERN	Weighing	Readability Verification		Minimal	Linearity	Weighing Net			Options	
	capacity [Max] g	[d] g	value [e] g	load [Min] g	g	plate	weight kg	Verification	DAkkS Calibr. Certificate DAkkS KERN	
								M		
								KERN		
EW 220-3NM	220	0,001	-	-	± 0,002	А	1,4	-	963-127	
EW 420-3NM	420	0,001	-	-	± 0,003	А	1,4	-	963-127	
EW 620-3NM	620	0,001	-	-	± 0,003	Α	1,4	-	963-103	
EW 820-2NM	820	0,01	-	-	± 0,01	В	1,6	-	963-127	
EW 2200-2NM	2200	0,01	-	-	± 0,01	С	3,0	-	963-127	
EW 4200-2NM	4200	0,01	-	-	± 0,02	С	3,0	-	963-127	
EW 6200-2NM	6200	0,01	-	-	± 0,03	С	3,0	-	963-104	
EW 12000-1NM	12000	0,1	-	-	± 0,2	С	3,0	-	963-128	

Note: For devices that require verification (conformity assessment according to NAWI 2014/31/EU), please include the verification when placing your order. The initial verification is not possible after delivery. Please inform the full address of the location of use for the initial verification.

EG 220-3NM	220	0,001	0,01	0,02	± 0,002	Α	2,0	965-216 🗓	963-127	
EG 420-3NM	420	0,001	0,01	0,02	± 0,003	Α	1,8	965-216 🗓	963-127	
EG 620-3NM	620	0,001	0,01	0,1	± 0,004	Α	2,0	965-201 🗓	963-103	
EG 2200-2NM	2200	0,01	0,1	0,5	± 0,01	С	4,0	965-216 🗓	963-127	
EG 4200-2NM	4200	0,01	0.1	0,5	± 0,02	С	4,0	965-216 🗓	963-127	

# **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 recipés 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



 $\mathcal{Z}$ 

# Weighing units

(100%)

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



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

Plug-in power supply



# 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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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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