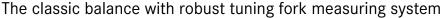
#### Precision balances KERN EW-N · EG-N





### **Features**

- 11 KERN EG-N: 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
- · KERN EW-N: Adjusting program CAL for quick setting of the balance accuracy using an external test weight at an additional price, see test weights
- · 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

- · GLP/ISO record keeping of weight values
- · Totalising of pieces when counting
- Draught shield standard for models with weighing plate size  ${\mathbb A}$  , 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
- Ø 118 mm, stainless steel, see larger picture B W×D 170×140 mm, stainless steel
- W×D 180×160 mm, stainless steel
- · Overall dimensions W×D×H (without draught shield) A, B 182×235×65 mm, © 265×192×87 mm









- Net weight 
   ■, 
   approx. 2,0 kg, 
   □ approx. 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 KERN EG-A09S05
- · Internal rechargeable battery pack, operating time up to 32 h without backlight, charging time approx. 12 h, for models with weighing plate size A, B KERN EG-A04 **©** KERN EG-A06
- · 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 **©** 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)
- Further details, plenty of further accessories and suitable printers see Accessories

STANDARD













































Model	Weighing capacity [Max]	Readability [d]	Verification value [e]	Minimal load [Min]	Linearity	Weighing plate	Option		
							Verification	DAkkS Calibr. Certificate DAkkS	
							M		
KERN	g	g	g	g	g		KERN	KERN	
EW 220-3NM	220	0,001	-	-	± 0,002	Α	-	963-127	
EW 420-3NM	420	0,001	-	-	± 0,003	А	-	963-127	
EW 620-3NM	620	0,001	-	-	± 0,003	А	-	963-103	
EW 820-2NM	820	0,01	-	-	± 0,01	В	-	963-127	
EW 2200-2NM	2200	0,01	-	-	± 0,01	С	-	963-127	
EW 4200-2NM	4200	0,01	-	-	± 0,02	С	-	963-127	
EW 6200-2NM	6200	0,01	-	-	± 0,03	С	-	963-104	
FW 12000-1NM	12000	0.1	_	_	+ 0.2	C	_	963-128	

Note: For applications that require verification, please order verificati on at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use

To modulo nation of the nation											
EG 220-3NM	220	0,001	0,01	0,02	± 0,002	A	965-216 🎚	963-127			
EG 420-3NM	420	0,001	0,01	0,02	± 0,003	A	965-216 🎚	963-127			
EG 620-3NM	620	0,001	0,01	0,1	± 0,004	A	965-201 🗓	963-103			
EG 2200-2NM	2200	0,01	0,1	0,5	± 0,01	C	965-216 🎚	963-127			
EG 4200-2NM	4200	0.01	0.1	0.5	± 0.02	С	965-216 Ⅲ	963-127			

# **BALANCES & TEST SERVICE 2023**

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



#### **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.



#### **KERN Universal Port (KUP):**

allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WLAN, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort



#### 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 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



#### GLP/ISO log:

The balance displays weight, date and time, independent of a printer connection

and other digital systems



#### 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



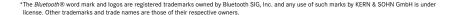
# Hold function:

(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.





#### 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

