# Compact laboratory balance KERN EWJ











# High-quality precision balance with automatic internal adjustment, also with EC type approval [M]

# **Features**

- · Easy to use: All primary functions have their own key on the keypad
- · Automatic internal adjustment, time-controlled every 2 h, guarantees high degree of accuracy and makes the balance independent of its location
- · Capacity display: A bargraph display lights up to show how much of the weighing range is still available
- · KERN EWJ-H/-M: USB data interface for transferring weighing data to the PC, printer etc.
- KERN EWJ-SM: Cost-effective variant without data interfaces
- KERN EWJ 300-3, 600-2M, 600-2SM: Draught shield standard, Weighing space W×D×H 134×128×80 mm
- 🔳 KERN EWJ 300-3H: Large glass draught shield with 3 sliding doors for easy access to the items being weighed. Weighing space W×D×H 155×175×217 mm
- · Protective working cover included with delivery

# **Technical data**

- · Large LCD display, digit height 16,5 mm
- · Dimensions weighing surface
- Ø 80 mm, stainless steel
- Ø 120 mm, stainless steel
- D W×D 155×145 mm, stainless steel
- · Overall dimensions (without draught shield) W×D×H
- A, B 220×315×90 mm
- © 220×315×105 mm
- D 215×330×105 mm
- Overall dimensions (incl. draught shield)  $W \times D \times H$

EWJ 300-3, 600-2M, 600-2SM: 220×340×180 mm

EWJ 300-3H: 220×340×321 mm

• Permissible ambient temperature KERN EWI: 15 °C/35 °C KERN EWJ-M: 15 °C/30 °C

# Accessories

- · Protective working cover, scope of delivery 5 items, KERN EWJ-A04S05
- · Internal rechargeable battery pack, operating time up to 20 h without backlight, charging time approx. 12 h, KERN KFB-A01
- · KERN EWJ-H/-M: Software BalanceConnection, for flexible recording or transmission of measured values, in particular also to Microsoft® Excel or Access as well as transfer of this data to other Apps and programs, for more details see the internet, Scope of supplies: 1 CD, 1 license, KERN SCD-4.0
- · RS-232/WiFi adapter for wireless connection to networks and WiFi capable devices, such as tablets, laptops or smartphones, KFRN YKI-03
- RS-232/Ethernet adapter for connection to an IP-based Ethernet network, KERN YKI-01
- Further details, plenty of further accessories and suitable printers see Accessories

### STANDARD































Model KERN	Weighing capacity [Max] g	Readability [d] g	Verification value [e] g	Minimal load [Min] g	Linearity g	Weighing plate	Option	
							Verification	DAkkS Calibr. Certificate DAkkS KERN
							MIII KERN	
EWJ 300-3	300	0,001	-	-	± 0,005	A	-	963-127
EWJ 300-3H	300	0,001	-	-	± 0,005	A	-	963-127
FWI 3000-2	3000	0.01	_		+ 0.05	C		963-127

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.											
EWJ 600-2SM	600	0,01	0,1	0,5	± 0,03	В	965-216	963-127			
EWJ 600-2M	600	0,01	0,1	0,5	± 0,03	В	965-216	963-127			
EWJ 6000-1SM	6000	0,1	1	5	± 0,3	D	965-217	963-128			
FWI 6000-1M	6000	0.1	1	5	+ 0.3	D	965-217	963-128			

# **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



### 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 weight, date and time, independent of a printer connection



### 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





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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