

Compact Laboratory Balance KERN PFB











# Quick-display precision balance with user-friendly concept of operation mode – now also with Checkweighing function

#### **Features**

- NEW: KERN PFB 600-3, PFB 6000-2: The measuring system's exceptionally high resolution
  of points ensures the highest level of accuracy
  with large weighing ranges
- NEW: Weighing with tolerance range (checkweighing): a visual and audible signal helps with portioning, dispensing or grading
- Standardised, convenient KERN concept of operation: All primary functions have their own key on the keypad
- Compact size, practical for small spaces
- Capacity display: A bargraph display lights up to show how much of the weighing range is still available
- Level indicator and levelling feet for precise levelling of the scale, fitted as standard, to give the most accurate weighing result

 Draught shield standard for models with weighing plate size , E, removable, Weighing space W×D×H 140×150×65 mm

#### Technical data

- Backlit LCD display, digit height 21 mm
- $\bullet \ \, {\rm Dimensions} \ weighing \ surface, \ stainless \ steel$
- A Ø 80 mm
- **B** Ø 120 mm
- C W×D 190×180 mm, see larger picture
- Overall dimensions W×D×H 210×315×90 mm
- Permissible ambient temperature 15 °C/30 °C

#### Accessories

- Protective working cover, scope of delivery 5 items, KERN PFB-A12S05
- Bluetooth data interface for wireless data transfer to PC or tablets, supports Bluetooth 2.0 and 4.0, must be ordered at purchase, KERN PFB-A10
- Internal rechargeable battery pack, operating time up to 72 h without backlight, charging time approx.
   6,5 h, must be ordered at purchase,
   KERN EWJ-A06
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD





























#### Model Weighing capacity Readability Reproducibility Linearity Weighing plate Options **DAkkS Calibr. Certificate** [Max] [d] DAkkS **KERN** g g g g KERN PFB 120-3 120 0,001 0,002 ± 0,003 Α 963-127 PFB 200-3 200 0,001 0,002 $\pm 0,004$ Α 963-127 Α PFB 300-3 300 0,001 0,003 ± 0,005 963-127 600 0.001 0.003 $\pm 0.003$ В 963-103 PFB 600-3 PFB 600-2 600 0,01 0,01 $\pm$ 0,02 В 963-127 PFB 1200-2 1200 0,01 0,02 $\pm 0,03$ В 963-127 PFB 2000-2 2000 0.02 963-127 0.01 $\pm 0.04$ В PFB 3000-2 3000 0,01 0,03 ± 0,05 В 963-127 PFB 6000-2 6000 C 963-104 0,01 0,03 $\pm 0.03$ C PFB 6000-1 6000 0,1 0,1 ± 0,2 963-128





#### 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 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 opera-

tion. The battery type is

specified for each device



BATT

## 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



# **Plug-in power supply** 230V/50Hz in standard version for EU, CH.

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



#### **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



