



## The new standard in the laboratory with robust tuning fork weighing system

### Features

- **1** KERN PNJ: **Automatic internal adjustment**, guarantees high degree of accuracy and makes the balance independent of its location of use. Ideal for mobile applications which require verification, such as ambulatory gold and jewellery purchasing
- **2** KERN PNS: **Adjusting program CAL** for quick setting of the balance accuracy using an external test weight
- **High-quality tuning fork measuring system** for steady weight values and continuous weighing
- **Capacity display:** A bar lights up to show how much of the weighing range is still available
- **Precise counting:** The automatic reference weight optimisation of reference weight gradually improves the average piece weight value

- **Compact size**, practical for small spaces
- **Large, shock proof weighing plate made of stainless steel**
- **Large glass draught shield** with 3 sliding doors for easy access to the items being weighed. Weighing space W×D×H 172×171×160 mm, for models with weighing plate size **A**

### Technical data

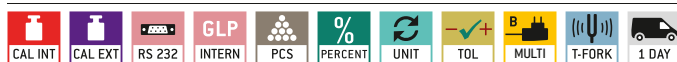
- Large LCD display, digit height 16,5 mm
- Dimensions weighing surface, stainless steel
  - A** Ø 140 mm
  - B** W×D 190×190 mm, see larger picture
- Overall dimensions W×D×H for models with weighing plate size
  - A** 202×293×266 mm
  - B** 196×293×89 mm

- Net weight for models with weighing plate size
  - A** approx. 2,2 kg
  - B** approx. 2,6 kg
- Permissible ambient temperature 5 °C/40 °C

### Accessories

- **Protective working cover**, standard, can be re-ordered, scope of delivery: 5 items, KERN PNJ-A01S05
- **3** **Precious stones plate**, aluminium with practical spout, W×D×H 83×66×23 mm, KERN AEJ-A05
- **RS-232/Ethernet adapter** for connection to an IP-based Ethernet network, KERN YKI-01
- **RS-232/Bluetooth adapter** to connect to Bluetooth capable devices, such as Bluetooth printers, tablets, laptops, smartphones, etc., KERN YKI-02
- **RS-232/WiFi adapter** for wireless connection to networks and WLAN capable devices, such as tablets, laptops or smartphones, KERN YKI-03
- Further details, plenty of further accessories and suitable printers see *Accessories*

#### STANDARD



#### OPTION



#### FACTORY



Model	Weighing range [Max]	Readout [d]	Verification value [e]	Minimal load [Min]	Linearity	Weighing plate	Options		
							Verification		DAkkS Calibr. Certificate
							M	KERN	
KERN	g	g	g	g	g				
PNS 600-3	620	0,001	-	-	± 0,004	<b>A</b>	-	-	963-127
PNS 3000-2	3200	0,01	-	-	± 0,02	<b>B</b>	-	-	963-127
PNS 12000-1	12000	0,1	-	-	± 0,2	<b>B</b>	-	-	963-128
Note: For applications that require verification, please order verification 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.									
PNJ 600-3M	620	0,001	0,01	0,02	± 0,004	<b>A</b>	965-216	<b>I</b>	963-127
PNJ 3000-2M	3200	0,01	0,1	0,5	± 0,02	<b>B</b>	965-216	<b>II</b>	963-127
PNJ 12000-1M	12000	0,1	1	5	± 0,2	<b>B</b>	965-217	<b>III</b>	963-128

# KERN Pictograms:



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



**Piece counting:** Reference quantities selectable. Display can be switched from piece to weight.



**Rechargeable battery pack:** Rechargeable set.



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



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



**Universal mains adapter:** with universal input and optional input socket adapters for  
A) EU, GB  
B) EU, GB, CH, USA  
C) EU, GB, CH, USA, AUS



**Memory:** Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.



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



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



**Alibi memory:** Electronic archiving of weighing results, complying with the 2014/31/EU standard.



**Recipe level C:** Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, multiplier function, adjustment of recipe when dosages are exceeded or barcode recognition.



**Power supply:** Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request.



**Data interface RS-232:** To connect the balance to a printer, PC or network.



**Weighing principle: Strain gauge**  
Electrical resistor on an elastic deforming body.



**RS-485 data interface:** To connect the balance to a printer, PC or other peripherals. High tolerance against electromagnetic disturbance.



**Totalising level A:** The weights of similar items can be added together and the total can be printed out.



**Weighing principle: Tuning fork**  
A resonating body is electromagnetically excited, causing it to oscillate.



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



**Percentage determination:** Determining the deviation in % from the target value (100 %).



**Weighing principle: Electromagnetic force compensation** Coil inside a permanent magnet. For the most accurate weighings.



**Bluetooth\* data interface:** To transfer data from the balance to a printer, PC or other peripherals.



**Weighing units:** Can be switched to e.g. non-metric units at the touch of a key. See balance model. Please refer to KERN's website for more details.



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



**WLAN data interface:** To transfer data from the balance to a printer, PC or other peripherals.



**Weighing with tolerance range:** Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning.



**Verification possible:**  
The time required for verification is specified in the pictogram.



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



**Hold function:** (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.



**DAkKS calibration possible (DKD):** The time required for DAkKS calibration is shown in days in the pictogram.



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



**Protection against dust and water splashes IPxx:** The type of protection is shown in the pictogram.



**Package shipment:** The time required for internal shipping preparations is shown in days in the pictogram.



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



**ATEX explosion protection:** Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.



**Pallet shipment:** The time required for internal shipping preparations is shown in days in the pictogram.



**Wireless data transfer:** between the weighing unit and the evaluation unit using an integrated radio module.



**Stainless steel:** The balance is protected against corrosion.



**Warranty:** The warranty period is shown in the pictogram.



**GLP/ISO log:** The balance displays the weight, date and time, regardless of a printer connection.



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



**GLP/ISO log:** With weight, date and time. Only with KERN printers.



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

## KERN – Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight in the international OIML error limit classes E1-M3 from 1 mg - 2500 kg. In combination with a DAkKS calibration certificate the best pre-requisite for proper balance calibration.

The KERN DAkKS calibration laboratory today is one of the most modern and best-equipped DAkKS calibration laboratories for balances, test weights and force-measurement in Europe.

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

### Range of services:

- DAkKS calibration of balances with a maximum load of up to 50 t
- DAkKS calibration of weights in the range of 1 mg – 2500 kg
- Volume determination and measuring of magnetic susceptibility (magnetic characteristics) for test weights
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DAkKS calibration certificates in the following languages DE, GB, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

## Your KERN specialist dealer: