



### Universal density set

#### KERN YDB-03

Universal density set for precise and convenient density determination of liquids and solids  $\leq/\geq 1$ . Suitable for all current KERN analytical balances.

Scope of delivery: Beaker ( $\varnothing \times H$  84×113 mm), thermometer, sample holder, adapter, equalising weights, volume plummet (stainless steel, 20 g), universal submersible basket for solid bodies which float and sink. The wire of the submersible basket has a diameter of 0.5 mm and therefore complies with the requirements of DIN EN ISO 1183-1 (test methods for the determination of density of non-foamed plastics)

Optional:

Density determination of the volume plummet, DAkkS calibration certificate with all data relating to the density and volume, KERN 962-335V

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**Internal adjusting:**  
 Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)
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**Network interface:**  
 For connecting the scale to an Ethernet network
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**Suspended weighing:**  
 Load support with hook on the underside of the balance
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**Adjusting program CAL:**  
 For quick setting up of the balance's accuracy. External adjusting weight required
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**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
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**Battery operation:**  
 Ready for battery operation. The battery type is specified for each device
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**Easy Touch:**  
 Suitable for the connection, data transmission and control through PC or tablet.
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**Rechargeable battery pack:**  
 Rechargeable set
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**Memory:**  
 Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.
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**GLP/ISO log:**  
 The balance displays weight, date and time, independent of a printer connection
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**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
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**Alibi memory:**  
 Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.
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**GLP/ISO log:**  
 With weight, date and time. Only with KERN printers.
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**Plug-in power supply:**  
 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available
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**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
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**Piece counting:**  
 Reference quantities selectable. Display can be switched from piece to weight
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**Integrated power supply unit:**  
 Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
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**Data interface RS-232:**  
 To connect the balance to a printer, PC or network
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**Recipe level A:**  
 The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out
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**Weighing principle: Strain gauges**  
 Electrical resistor on an elastic deforming body
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**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
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**Recipe level B:**  
 Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display
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**Weighing principle: Tuning fork**  
 A resonating body is electromagnetically excited, causing it to oscillate
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**USB data interface:**  
 To connect the balance to a printer, PC or other peripherals
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**Totalising level A:**  
 The weights of similar items can be added together and the total can be printed out
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**Weighing principle: Electromagnetic force compensation**  
 Coil inside a permanent magnet. For the most accurate weighings
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**Bluetooth\* data interface:**  
 To transfer data from the balance to a printer, PC or other peripherals
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**Percentage determination:**  
 Determining the deviation in % from the target value (100 %)
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**Weighing principle: Single cell technology:**  
 Advanced version of the force compensation principle with the highest level of precision
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**WiFi data interface:**  
 To transfer data from the balance to a printer, PC or other peripherals
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**Weighing units:**  
 Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details
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**Verification possible:**  
 The time required for verification is specified in the pictogram
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**Control outputs (optocoupler, digital I/O):**  
 To connect relays, signal lamps, valves, etc.
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**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
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**DAkkS calibration possible (DKD):**  
 The time required for DAkkS calibration is shown in days in the pictogram
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**Analogue interface:**  
 to connect a suitable peripheral device for analogue processing of the measurements
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**Hold function:**  
 (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value
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**Factory calibration (ISO):**  
 The time required for Factory calibration is shown in days in the pictogram
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**Interface for second balance:**  
 For direct connection of a second balance
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**Protection against dust and water splashes IPxx:**  
 The type of protection is shown in the pictogram.
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**Package shipment:**  
 The time required for internal shipping preparations is shown in days in the pictogram
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**Pallet shipment:**  
 The time required for internal shipping preparations is shown in days in the pictogram

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