

NEW



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Discover more details and matching accessories online!

High-precision moisture analyser for demanding analyses

Features

- Very high resolution: 0,1 mg / 1 mg readout for precise analyses even with low moisture content
- Intuitive operation in three steps (tare – add sample – start) for simple and reproducible analyses
- Real-time visualisation: Drying curves can be shown directly on the display
- Backlit LCD graphic display, digit height 15 mm
- Halogen quartz glass heater 400 W
- Internal scale memory for up to 1000 measurement results
- The last measured value remains visible in the display until the next measurement

Main scope of applications

- Food processing and quality control
- Cosmetics industry
- Plastics and polymer industry
- Building materials and cement industry

STANDARD

OPTION

KERN	DIS 50-4 <small>NEW</small>	DIS 100-3 <small>NEW</small>
Readability [d] Weight/Moisture (%)	0,0001 g / 0,0001 %	0,001 g / 0,001 %
Weighing capacity [Max]	50 g	120 g
Reproducibility weight of sample 2 g*	0,05 %	0,1 %
Reproducibility weight of sample 10 g*	0,02 %	0,03 %
Display after drying (Display can be switched over at any time)		
Moisture [%] = Moisture content (M) from wet weight (W)	0,01 % - 100 %	
Dry content [%] = Dry weight (D) from [W]	100 % - 0,01 %	
ATRO [%] [(W-D) : D] · 100 %	0-999 %	
Moisture content (M)	Absolute value in [g]	
Temperature range (in steps up to)	30 °C - 175 °C (1 °C)	
Drying modes	Standard drying, Rapid drying, Gentle drying, Drying in levels	
Switch-off criteria	time controlled, automatic, manual	
Overall dimensions W×D×H	211×342×187 mm	
Net weight	5 kg	
Price excl. of VAT ex works €		
Option Calibr. Certificate DAKkS accr. Mass	963-127	
Option Factory calibration certificate Temperature	964-305	

* application-dependet

KERN Pictograms



Internal adjustment
Quick setting up of the balance's accuracy with internal adjusting weight



External adjustment
Quick setting up of the balance's accuracy with external adjusting weight



EasyTouch
Suitable for the connection, data transmission and control through PC or tablet



Memory
Device memory capacity, e.g. for article data, measuring data, tare weights, PLU etc.



Alibi memory
Secure, electronic archiving of measuring results, complying with the 2014/31/EU standard



Data interface RS-232
To connect the device to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible



Data interface RS-485
To connect the device to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible



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



USB data interface
To connect the device to a printer, PC or other peripherals



Bluetooth* data interface
To transfer data to a printer, PC or other peripherals



WiFi data interface
To transfer data to a printer, PC or other peripherals



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



User Management
The measuring device enables the creation of passwordprotected user profiles with different authorisation levels



Statistics
sing the saved values, the device calculates statistical data, such as average value, standard deviation etc.



Analogue interface
To connect a suitable peripheral device for analogue processing of the measurements



PC Software
to transfer the measurements from the device to a PC



Network interface
For connecting the measuring device to an Ethernet network



KERN Communication Protocol (KCP)
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 internal
The measuring device generates a GLP-compliant printout, independent of a printer connection



Value & Time
The measuring device outputs the value, date and time, regardless of the connected printer



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



Net-Total
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



Formulation
Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display



Totalising function
The weights of similar items can be added together and the total can be printed out



Density Determination
The density of liquids and solids with a density of $\leq/\geq 1$ is determined directly in the measuring device



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



Units
Can be switched to e.g. nonmetric units. For further details see website



Mesuring with tolerance range (Check weighing)
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
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 EU, CH, GB or EU, CH, GB, US or EU, CH, GB, US, AUS



Plug-in power supply
230V/50Hz in standard version for EU. On request GB, AUS or US version available



Integrated power supply unit
Integrated in measuring device. 230V/50Hz standard EU. More standards e.g. GB, AUS or US 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 3 working days



Accredited calibration (DKD)
The time required for accredited calibration is 3 working days



Factory calibration (ISO)
The time required for factory calibration is 4 working days



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