Moisture analyser KERN DLB











The moisture analyser for heavy, high-volume samples



















OPTION	
DAkkS	
+3 DAYS	

Model KERN	DLB 160-3A	
Readout [d]	0,001 g / 0,01 %	
Weighing range [Max]	160 g	
Reproducibility, weight of sample 10 g	0,05 %	
Display after drying (Display can be switched over at any time)		
Moisture [%] = Moisture content (M) from wet weight (W)	0 - 100 %	
Dry content [%] = Dry weight (D) from (W)	100 - 0 %	
ATRO [%] [(W-D) : D] · 100%	0 - 999 %	
Moisture content (M)	Absolute value in [g]	
Temperature range	35 °C - 160 °C in steps up to 1 °C	
Drying modes		
Switch off criteria	• Automatic unrestricted switch off (Selectable loss in weight 0,1%-9,9% in 60 s) • Time controlled switch off (1 min – 99 min) • Manual switch off at the press of a button	
Recall of measurement	 Continuous output (residual weight) At the end of the drying process, manual or automatic (Only in connection with KERN YKB-01N printer or PC) 	
Overall dimensions WxDxH	210x340x225 mm	
Netweight	approx. 4,2 kg	
Option DAkkS Calibr. Certificate	963-127	

Features

- Backlit LCD display, digit height 17 mm
- Current moisture content in % 2 Unit of the shown result, e.g. % moisture Drying process active
- Halogen quartz glass heater 400 W
- Internal memory for automatic sequence of 5 complete drying processes
- The last value measured remains on the display until it is replaced by a new measurement
- 10 sample plates included
- Application handbook: On the internet, you will find a practical application handbook containing many examples, field reports, settings and tips for each KERN moisture analyser

Accessories

- \bullet Sample plates aluminium, Ø 90 mm. Box with 80 pieces, KERN MLB-A01A
- Round fiberglass filter e.g. for samples that splash or become encrusted. Box with 100 pieces, KERN RH-A02
- 5 Temperature calibration set consists of measuring sensor and display device, KERN DLB-A01
- Protective working cover standard. Can be re-ordered, scope of delivery: 5 items, KERN ALJ-A01S05
- Suitable printers see page 177 ff.

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.



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



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 RECIPE ingredients (net total).



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



ALIBI

• AHA •

RS 232

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



RECIPE

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

Recipe level C: Internal memory for complete

recipes with name and target value of the

recipe ingredients. User guidance through

display, adjustment of recipe when dosages are exceeded, multiplier function, barcode.



Rechargeable battery pack: Rechargeable set.



Universal mains adapter: with universal input



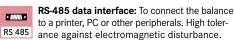
and optional input socket adapters for A) EU, GB



B) EU, GB, CH, USA C) EU, GB, CH, USA, AUS



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



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

Alibi memory: Electronic archiving of

weighing results, complying with the

2009/23/EC standard.



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



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



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ВТ

WLAN

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peripherals.

peripherals.

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

WLAN data interface: To transfer data

from the balance to a printer, PC or other



Totalising level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages



Weighing principle: Strain gauge Electrical resistor on an elastic



are exceeded, multiplier function, barcode recognition.

Percentage determination: Determining

the deviation in % from the target value



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



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



(100 %).

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



Advanced version of the force compensation principle with the highest level of precision.



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



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



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



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



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



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



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.



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



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.



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



Stainless steel: The balance is protected against corrosion.



Warranty: The warranty period is shown in the pictogram.

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 - 2000 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 forcemeasurement 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
- · Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices • DAkkS calibration certificates in the following languages D, GB, F, I, E, NL, PL

Your KERN specialist dealer:

益瀚國際科技股份有限公司 YENSTRON CORP. 台灣總部:407227台中市西屯區工業區一路2巷7號1F 台中總公司/TEL:(04)2359-3199 FAX:(04)2359-8507 南/TEL:(06)358-3169 FAX:(06)358-3167 http://www.yenstron.com.tw E-mail:sale99@yenstron.com.tw

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