

# Moisture analyser KERN DBS

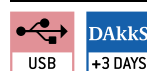


## Modern moisture analyser with 10 memories and graphic display

STANDARD



OPTION



<b>KERN</b>	<b>DBS 60-3</b>
<b>Readout [d]</b>	0,001 g / 0,01 %
<b>Weighing range [Max]</b>	60 g
<b>Reproducibility, weight of sample 2 g</b>	0,15 %
<b>Reproducibility, weight of sample 10 g</b>	0,02 %
<b>Display after drying (Display switchable at all times)</b>	
<b>Moisture [%] = Moisture content (M) from wet weight (W)</b>	0 - 100 %
<b>Dry content [%] = Dry weight (D) from (W)</b>	100 - 0 %
<b>ATRO [%] [(W-D) : D] - 100%</b>	0 - 999 %
<b>Moisture content [g] (M)</b>	Absolute value in [g]
<b>Temperature range</b>	50 - 200 °C in steps of 1 °C
<b>Drying modes</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Standard drying</li> <li><input type="checkbox"/> Gradual drying</li> <li><input type="checkbox"/> Gentle drying</li> <li><input type="checkbox"/> Rapid drying</li> </ul>
<b>Switch off criteria</b>	<ul style="list-style-type: none"> <li>• When the set time has expired 1 min - 4 h</li> <li>• When the weight loss per unit of 157 f.</li> </ul>
<b>Call up of measurement</b>	Interval can be set from 1 sec - 10 min (Only when used with printer KERN YKB-01N or PC)
<b>Overall dimensions WxDxH</b>	202x336x157 mm
<b>Net weight</b>	approx. 4,2 kg
<b>Option DAkKS Calibr. Certificate</b>	963-127

### Features

- Backlit LCD display, digit height 15 mm
- 1 Drying program
- 2 Previous drying time
- 3 Current temperature
- 4 Unit of the shown result, e.g. moisture [%]
- 5 Current moisture content in %
- 6 Drying mode/Status display drying
- **Halogen quartz glass heater** 400 W
- **Observation window above the sample**, useful during initial setting
- **Internal memory** for automatic run of 10 drying programs and 100 drying processes already executed
- The last value measured remains on the display until it is replaced by a new measurement
- **Sample description** for up to 99 samples, 2 digits, freely programmable, and printed in the measuring protocol
- **Date and time display** as standard
- **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

- **Sample plates aluminium**, Ø 92 mm. Box with 80 pieces, KERN MLB-A01
- **Round fiberglass filter** e. g. for samples that splash or become encrusted. Box with 80 pieces, KERN RH-A02
- **Temperature calibration set** consists of measuring sensor and display device, KERN DBS-A01
- **USB interface kit** for bi-directional data exchange between moisture analyser and computer. Scope of delivery: USB cable, driver, Software Balance Connection, KERN DBS-A02
- **Suitable printers** see page 157 ff.

# KERN Pictograms

 <b>Internal adjusting:</b> Quick setting up of the balance's accuracy with internal adjusting weight (motordriven).	 <b>Recipe level A:</b> Separate memory for the weight of the tare container and the recipe ingredients (net total).	 <b>Suspended weighing:</b> Load support with hook on the underside of the balance.
 <b>Adjusting program CAL:</b> For quick setting up of the balance's accuracy. External adjusting weight required.	 <b>Recipe level B:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.	 <b>Battery operation:</b> Ready for battery operation. The battery type is specified for each device.
 <b>Memory:</b> Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	 <b>Recipe level C:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation functions.	 <b>Rechargeable battery pack:</b> Rechargeable set.
 <b>Data interface RS-232:</b> To connect the balance to a printer, PC or network.	 <b>Totalising level A:</b> The weights of similar items can be added together and the total can be printed out.	 <b>Mains adapter:</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version available.
 <b>RS-485 data interface:</b> To connect the balance to a printer, PC or other peripherals. High tolerance against electromagnetic disturbance.	 <b>Totalising level C:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation.	 <b>Power supply:</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 <b>USB data interface:</b> To connect the balance to a printer, PC or other peripherals.	 <b>Strain gauges:</b> Electrical resistor on an elastic deforming body.	 <b>Tuning fork principle:</b> A resonating body is electromagnetically excited, causing it to oscillate.
 <b>Bluetooth data interface:</b> To transfer data from the balance to a printer, PC or other peripherals.	 <b>Percentage determination:</b> Determining the deviation in % from the target value (100 %).	 <b>Electromagnetic force compensation:</b> Coil inside a permanent magnet. For the most accurate weighings.
 <b>WLAN data interface:</b> To transfer data from the balance to a printer, PC or other peripherals.	 <b>Weighing units:</b> 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.	 <b>Single cell technology:</b> Advanced version of the force compensation principle with the highest level of precision.
 <b>Control outputs (optocoupler, digital I/O):</b> To connect relays, signal lamps, valves, etc.	 <b>Weighing with tolerance range:</b> Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning.	 <b>Verification possible:</b> The time required for verification is specified in the pictogram.
 <b>Interface for second balance:</b> For direct connection of a second balance.	 <b>Vibration-free weighing:</b> (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.	 <b>DAkkS calibration possible:</b> The time required for DAkkS calibration is shown in days in the pictogram.
 <b>Network interface:</b> For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter.	 <b>Protection against dust and water splashes IPxx:</b> The type of protection is shown in the pictogram. For details see the glossary.	 <b>Package shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram.
 <b>GLP/ISO log:</b> The balance displays the weight, date and time, regardless of a printer connection.	 <b>ATEX explosion protection:</b> Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.	 <b>Pallet shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram.
 <b>GLP/ISO log:</b> With weight, date and time. Only with KERN printers, see "Accessories"	 <b>Stainless steel:</b> The balance is protected against corrosion.	 <b>Warranty:</b> The warranty period is shown in the pictogram.
 <b>Piece counting:</b> Reference quantities selectable. Display can be switched from piece to weight.		

## 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 force-measurement in Europe.

## Your KERN specialist dealer:

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 6 t
- DAkkS calibration of weights in the range of 1 mg - 500 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