

# Moisture analyser KERN DBS



## Modern moisture analyser with 10 memories and graphic display

### STANDARD



only with printer

### OPTION



KERN	DBS 60-3
Readout [d]	0,001 g / 0,01 %
Weighing range [Max]	60 g
Reproducibility, weight of sample 2 g	0,15 %
Reproducibility, weight of sample 10 g	0,02 %
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 [%] $[(W-D) : D] \cdot 100\%$	0 - 999 %
Moisture content [g] (M)	Absolute value in [g]
Temperature range	50 - 200 °C in steps up to 1 °C
Drying modes	<ul style="list-style-type: none"> <li>Standard drying</li> <li>Drying in levels</li> <li>Gentle drying</li> <li>Rapid drying</li> </ul>
Switch off criteria	<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 time falls below the target value (30 sec)</li> </ul>
Recall of measurement	Interval can be set from 1 sec - 10 min (Only when used with printer KERN YKB-01 or PC)
Overall dimensions WxDxH	202x336x157 mm
Net weight	approx. 4,2 kg
Option DKD Calibr. Certificate	963-127




































### Features

- Backlit LCD display, digit height 17 mm
- 1 Drying program
- 2 Previous drying time
- 3 Current temperature
- 4 Unit for displaying the results
- 5 Current moisture content in %
- 6 Drying mode/Status display drying
- **Halogen quartz glass heater** 400 W
- **Observation window over the sample**, useful during initial adjustment
- **Internal memory** for automatic sequence of 10 drying programs and 100 drying processes carried out
- 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 is 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, adjustments and tips for each KERN moisture analyser

### Accessories

- **Sample plates aluminium**, Ø 92 mm. Unit of 80 pieces, KERN MLB-A01
- **Round fiberglass filter** e.g. for samples that splash or become encrusted. Unit of 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 supply: USB cable, driver, Software Balance Connection, KERN DBS-A02
- **Suitable printers** see page 138

# KERN Pictograms

 <b>Internal adjusting (CAL):</b> Quick setting 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>Rechargeable battery pack:</b> rechargeable set.
 <b>Adjusting program (CAL):</b> For quick setting 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 displays.	 <b>Mains adapter:</b> 230V/50Hz in standard version for Germany. On request GB, AUS or USA version.
 <b>Memory:</b> Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU.	 <b>Recipe level C:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through displays. Additional convenient functions, such as barcode and back calculation functions.	 <b>Power supply:</b> integrated in balance. 230V/50Hz in Germany. More standards e. g. GB, AUS, USA on request.
 <b>Data interface RS-232:</b> To connect the balance to a printer, PC or network.		 <b>Strain gauges:</b> Electrical resistor on an elastic deforming body.
 <b>RS 485 data interface:</b> To connect the balance to a printer, PC or other peripheral devices. High tolerance against electromagnetic disturbance.	 <b>Percentage determination:</b> Determining the deviation in % from the target value (100%).	 <b>Tuning fork principle:</b> A resonating body is electromagnetically excited, causing it to oscillate.
 <b>USB data interface:</b> To connect the balance to a printer, PC or other peripheral devices.	 <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>Electromagnetic force compensation:</b> Coil in a permanent magnet. For the most accurate weighings.
 <b>Bluetooth data interface:</b> To transfer data from the balance to a printer, PC or other peripheral devices.	 <b>Weighing with tolerance range:</b> Upper and lower limiting can be programmed individually, e.g. dosing/sorting and portioning.	 <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>Vibration-free weighing:</b> (Animal weighing program) Vibrations are filtered out so that a stable weight is obtained.	 <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>Spray and dust protection IPxx:</b> The type of protection is shown by the pictogram. For details see the glossary.	 <b>DKD calibration possible:</b> The time required for DKD 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 also use a universal RS-232/LAN converter.	 <b>Stainless steel:</b> the balance is protected against corrosion.	 <b>Package shipment:</b> The time required to manufacture the product internally is shown in days in the pictogram.
 <b>GLP/ISO record keeping:</b> of weighing data with date, time and identification-no. Only with printers from KERN.	 <b>Suspended weighing:</b> load support with hook on the underside of the balance.	 <b>Pallet shipment:</b> The time required to manufacture the product internally is shown in days in the pictogram.
 <b>Piece counting:</b> Reference quantities selectable. Display can be switched from piece to weight.	 <b>Battery operation:</b> Ready for battery operation. The battery type is specified for each device.	 <b>Warranty:</b> The warranty period is shown in the pictogram.

## Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight package for your balance, consisting of the test weight, box and DKD certificate, as proof of its accuracy ... the best pre-requisite for proper balance calibration.

In the extensive KERN test weight range, you will find test weights in the international OIML error limit classes: E1, E2, F1, F2, M1, M2, M3 with weights from 1 mg - 2000 kg.

The KERN DKD calibration laboratory for electronic balances and weights has been accredited by DKD since 1994 and today is one of the most modern and best-equipped DKD calibration laboratories for balances, test weights and force-measurement in Europe.

(DKD = German Calibration Service)

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

### Range of services:

- DKD calibration of balances with a maximum load of up to 6 t
- DKD 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
- DKD calibration certificates in the following languages  
D, GB, F, I, E, NL, PL

Do you have questions about your scale, the corresponding test weight or the calibration service? Your KERN specialist dealer will be pleased to assist you.

## Your KERN specialist dealer: