

Moisture Analyser KERN DLB



Moisture analyser with intuitive graphic display and step-by-step user guidance in 6 languages

Features

- Rapid and efficient operation thanks to the graphics display
- Backlit LCD graphic display, digit height 11 mm
- 6 direct keys for rapid access to the main functions

Home screen:

- 1 Main menu
- 2 Start drying process
- 3 Select drying temperature

4 Select shut-off criteria

5 Setting to zero/taring

6 Stand-by

During measurement:

7 Current temperature

8 Current heating profile

9 Active switch-off criteria

bk Abort drying process

bl Stop drying process

bm Display current drying parameters

bn Toggle the unit for displaying the results

STANDARD



OPTION



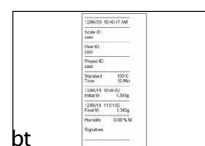
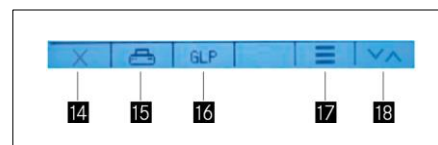
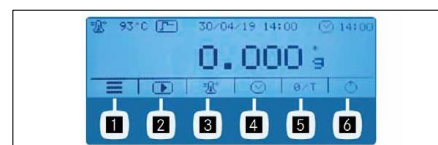
KERN

DLB 160-3A

| | |
|--|---|
| Readability [d] Weight/Moisture (%) | 0,001 g / 0,01% |
| Weighing capacity [Max] | 160 g |
| Reproducibility weight of sample 2 g* | 0,15% |
| 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) | Absolutwert in [g] |
| Temperature range (in steps up to) | 35 °C - 160 °C (1 °C) |
| Drying modes | <input checked="" type="checkbox"/> Standard drying <input type="checkbox"/> Rapid drying, preheating can be switched on |
| Switch-off criteria | <ul style="list-style-type: none"> • Automatic unrestricted switch-off (Selectable loss in weight 1 mg/30 s - 10 mg/30 s) • Time controlled switch-off (1 min - 99 min) • Manual switch-off at the press of a button |
| Log output | Interval adjustable (5 s - 250 s) |
| Overall dimensions WxDxH | 240x365x180 mm |
| Net weight | 4,82 kg |
| Price excl. of VAT ex works € | |
| Option DAKKS Calibr. Certificate Mass | KERN 963-127 |
| Option DAKKS Calibr. Certificate Temperature | KERN 964-305 |

* application-dependent

I ONLY WHILE STOCKS LAST



bt

At the end of the measurement:

- bo Exit drying program
- bp Print measurement report
- bq (De)activate, edit GLP parameters
- br Display detailed result
- bs Toggle the unit for displaying the results
- 400 W halogen-quartz glass heater
- User guidance in 6 languages (DE, EN, FR, IT, ES, PT)
- Automatic taring when starting a measurement by closing the lid
- The last value measured remains on the display until it is replaced by a new measurement
- bt Internal GLP; printout of balance ID, project ID, user ID, values determined by the drying process etc.
- 10 sample plates included
- Protective working cover included with delivery
- Application handbook: In the download centre you will find a practical application handbook containing many examples, field reports, settings and tips for each KERN moisture analyser

Accessories

- Protective working cover, scope of delivery 5 items, KERN ALJ-A01S05
- Sample plates aluminium, Ø 90 mm, unit of 80 pieces, KERN MLB-A01A
- Round fiberglass filter, medium mechanical stability, without organic binder, box of 100 pieces, KERN RH-A02
- Round fiberglass filter, medium mechanical stability, without organic binder, box of 100 pieces, KERN YMF-A01
- Temperature calibration set consists of measuring sensor and display device KERN DLB-A01N.
- Thermal printer, KERN YKB-01N
- Matrix needle printer, to print the weights on normal paper, ideal for long-term archiving, KERN 911-013



Internal adjusting
Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)



Adjusting program CAL
For quick setting up of the balance's accuracy. External adjusting weight required



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



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



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



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



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



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



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 peripherals



WIFI Data interface
To transfer data from the balance to a printer, PC or other peripherals



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



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



Interface for second balance
For direct connection of a second balance



Network interface
For connecting the scale to an Ethernet network



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



GLP/ISO log intern
The balance displays weight, date and time, independent of a printer connection



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



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



Recipe level A
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



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



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



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



Weighing units
Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details



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



Hold function
(Animal weighing program)
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
A) EU, CH, GB
B) EU, CH, GB, US
C) EU, CH, GB, US, AUS



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



Integrated power supply unit
Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS 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 specified in the pictogram



DAKKS calibration possible (DKD)
The time required for DAKKS calibration is shown in days in the pictogram



Factory calibration (ISO)
The time required for Factory calibration is shown in days in the pictogram



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