KERN SCD-4.0

BalanceConnection Software –
Flexible recording or transfer of measurements, particularly to Microsoft® Excel or Access

Features

- For operating systems Windows XP, Vista, 7, 8, 8.1, 10
- Supports balances measuring devices with RS 232, RS 485, Bluetooth, LAN or WLAN network (TCP/UDP/IP)
- Highly flexible formatting of the output (any order, formatting and rounding), particularly recording of date and time for every value transferred, if required
- Any number of devices/interfaces can be connected, as well as simultaneous and synchronised recording of several balances
- Key-activated or time-controlled interrogation of measurements or trigger of device functions, also for continuous recording
- The interface protocols for KERN balances are already predefined (standard configuration)
- Compatible interface cable included when you order a KERN balance at the same time
- Many different transfer and recording options:
  - Microsoft® Excel/Access/Word in the foreground or background
  - Other Windows applications (through key simulation), e.g. shipping software or ERP system (SAP, Sage, etc.)
  - File recording (e.g. as text or CSV file)
  - Print out on text or label printer
  - ODBC/SQL databases such as SQL Server or MySQL
  - Transfer to HTTP Webservices/Web forms
  - Screen output such as large display, line chart (drying curve for moisture analyzer), histogram, etc.
  - Enables the connection of medical balances to practice EDP systems using the device data transfer protocol (GDT) and also the HL7 protocol

Benefits

- Typing errors during e.g. manual transfer are avoided
- Automatic recording, e.g. for long-term tests
- GLP-compliant lab software

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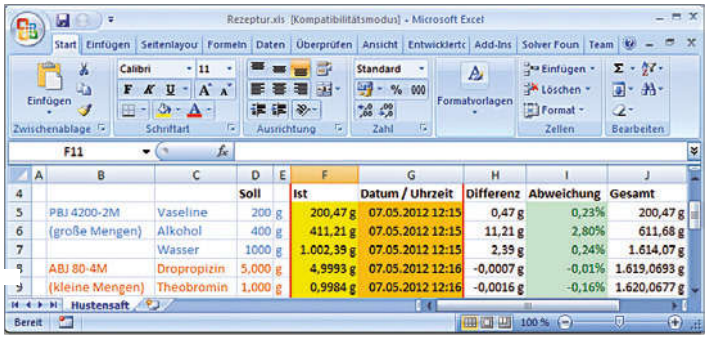
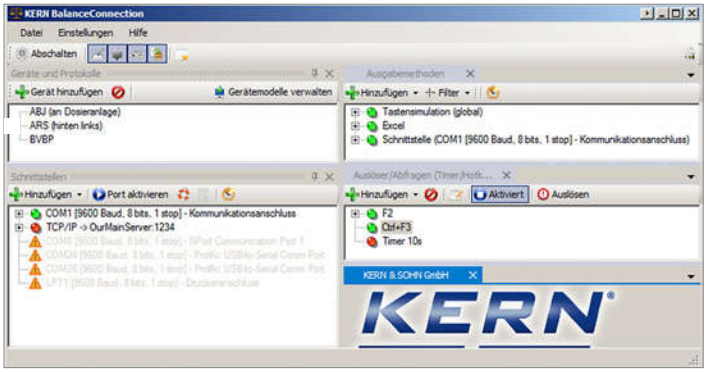


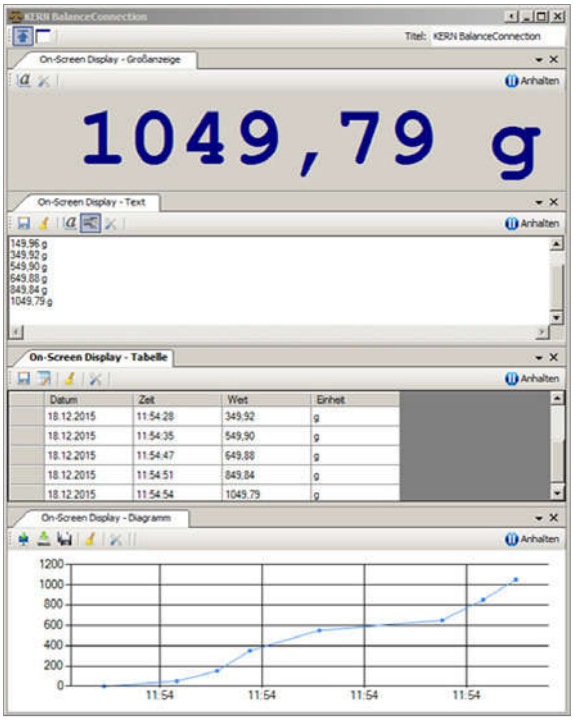
1 Easy transfer and editing of measuring results e.g. in Microsoft® Excel



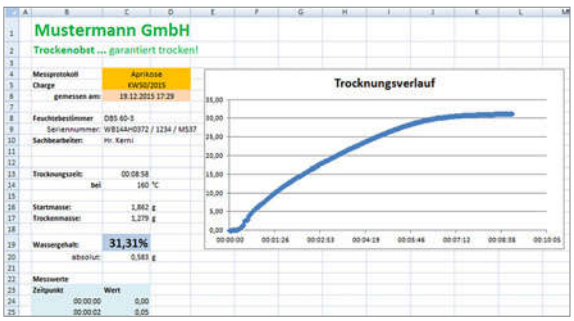
2 Full overview of devices, outputs, queries, interfaces, etc. shown on the output window immediately

Note

Do you have questions about our software? The team from our Industry 4.0 centre of expertise will be happy to help.
E-Mail: ITsupport@kern-sohn.com



3 Different on-screen displays with export function



4 Measurement report with line chart showing a moisture analysis

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KERN Pictograms

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

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.

Data interface RS-232: 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

WLAN 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.

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

Network interface: For connecting the scale to an Ethernet network

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

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: The balance displays serial number, user ID, weight, date and time, regardless of a printer connection

GLP/ISO log: 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

Recipe level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, multiplier function, adjustment of recipe when dosages are exceeded or barcode recognition

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 at the touch of a key. See balance model. Please refer to KERN's website for more details

Weighing 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: (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.

Stainless steel: The balance is protected against corrosion

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 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

Power supply: 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

Verification possible: The time required for verification is specified in the pictogram

DAkkS calibration possible (DKD): The time required for DAkkS 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

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 - 2500 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.
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
- Volume determination and measuring of magnetic susceptibility (magnetic characteristics) for test weights
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DAkkS calibration certificates in the following languages DE, GB, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

Your KERN specialist dealer:

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