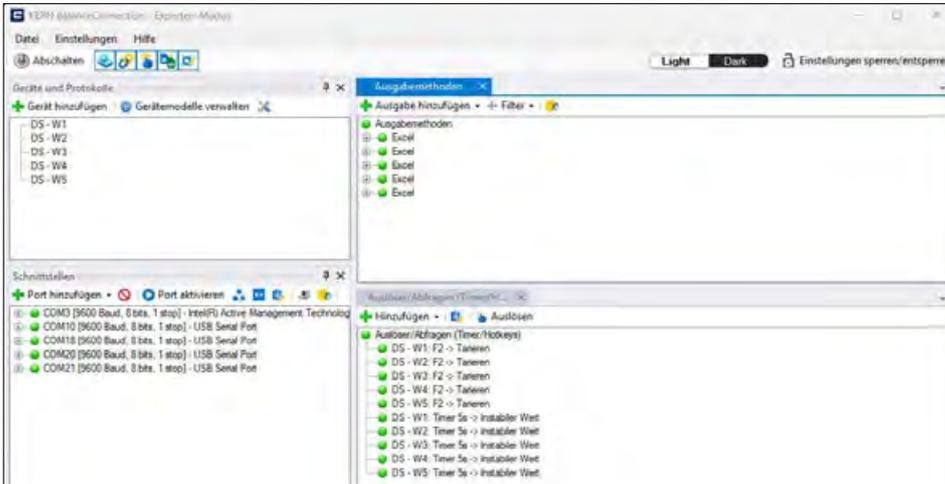# KERN Software BalanceConnection SCD-4.0

Flexible recording or transfer of measurements, particularly to Microsoft® Excel

Full overview of devices, outputs, queries, interfaces, etc. directly in the output window

Programme start and quick configuration of the RS-232/USB interface

Discover more details and matching accessories online!

Features

- For operating systems Windows 10, 11, -.NET Framwork 4.8.1 required
- Supports balances measuring devices with RS-232, RS-485, Bluetooth, LAN or WiFi 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
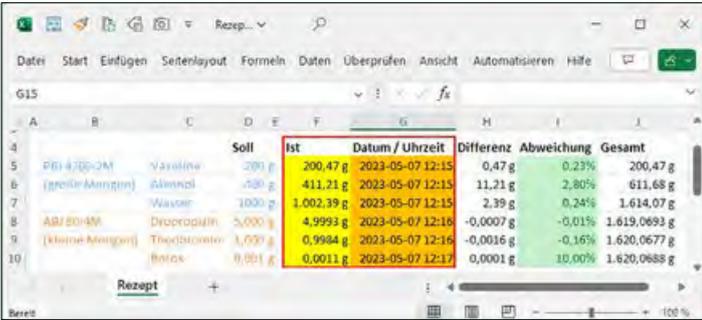- The interface protocols for KERN balances are already predefined (standard configuration)

- 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
  - Screen output such as large display, line chart (drying curve for moisture analyser), histogram, etc.

Benefits

- Typing errors during e.g. manual transfer are avoided
- Automatic recording, e.g. for long-term tests
- Supports GLP-compliant processes
- Can be used across different branches and applications
- Also available immediately as a download license
- Scope of delivery: Download link for 1 license, KERN SCD-4.0-DL
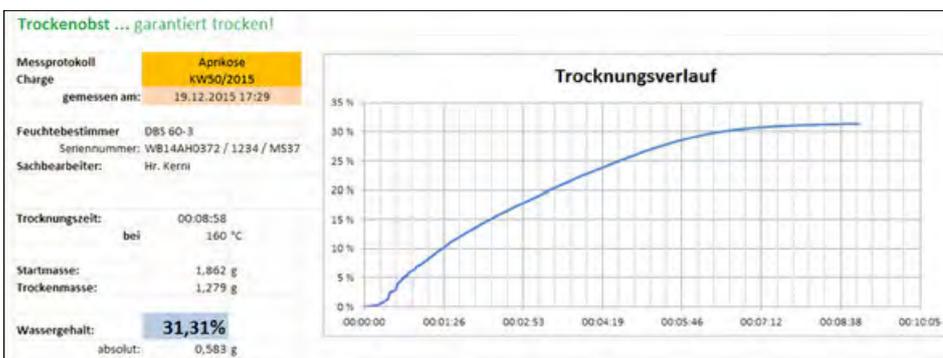
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⇄ KERN Software BalanceConnection SCD-4.0-PRO

Professional and highly flexible recording or transmission of measured values, in particular also to Microsoft® Excel or Access

Discover more details and matching accessories online!

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

Measurement protocol with moisture analysis progression diagram

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Additional features of the PRO version

- In addition to the functions of the standard version (see previous page), the PRO version offers the following enhanced features:
- ODBC/SQL databases such as SQL Server or MySQL
- Transfer to HTTP Webservices/Web forms
- Histogram
- Enables the connection of medical balances to practice EDP systems using the device data transfer protocol (GDT) and also the HL7 protocol
- Implementation of programs/scrips using freely-definable command lines
- Command sequences
- Defining the conditions for specific events and the reaction to these events
- Filter for stability recognition (configurable value storage)
- Central configuration repository, e.g. on the network
- On-screen displays with configurable user interface for flexible balance operation
- Diagram functions and filters: Range markers, extended filters such as slope and area calculation, new trend lines and optional display of the last value per data series

- The data from the diagram, histogram and table can be output in Excel, Word, PDF, CSV and PNG format. The large display is also available as a PNG, Word or PDF file – for a true representation that exactly matches the original
- Windows service for controlling and managing device connections and background processes including time-controlled file recording, printer methods and device data transfer integration. Centralised and user-specific configuration options
- Also available as a cost-optimised package with 5 licences
- Scope of delivery: Download link for 1 License, KERN SCD-4.0-PRO-DL
- Scope of delivery: Download link for 5 licences, KERN SCD-4.0-PRO-DL-AS05

Benefits

- Typing errors during e.g. manual transfer are avoided
- Ideal software where weighing data which has been collected needs to be transferred to a Windows PC
- Particularly suitable for professional integration of weighing systems into existing networks where there is a high demand for automated data transfer and further processing, for integration of databases
- Automatic recording, e.g. for long-term tests
- Supports GLP-compliant processes
- Can be used across different branches and applications
- Any number of balances can be used on one PC/workstation per licence
- Also available immediately as a download license

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KERN Pictograms

Internal adjustment
Quick setting up of the balance's accuracy with internal adjusting weight

External adjustment
Quick setting up of the balance's accuracy with external adjusting weight

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

Memory
Device memory capacity, e.g. for article data, measuring data, tare weights, PLU etc.

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

Data interface RS-232
To connect the device to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible

Data interface RS-48
To connect the device to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible

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

USB data interface
To connect the device to a printer, PC or other peripherals

Bluetooth* data interface
To transfer data to a printer, PC or other peripherals

WiFi data interface
To transfer data to a printer, PC or other peripherals

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

User Management
The measuring device enables the creation of passwordprotected user profiles with different authorisation levels

Statistics
sing the saved values, the device calculates statistical data, such as average value, standard deviation etc.

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

PC Software
to transfer the measurements from the device to a PC

Network interface
For connecting the measuring device to an Ethernet network

KERN Communication Protocol (KCP)
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 internal
The measuring device generates a GLP-compliant printout, independent of a printer connection

Value & Time
The measuring device outputs the value, date and time, regardless of the connected printer

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

Net-Total
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out

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

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

Density Determination
The density of liquids and solids with a density of ≤/≥ 1 is determined directly in the measuring device

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

Units
Can be switched to e.g. nonmetric units. For further details see website

Mesuring 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
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 EU, CH, GB or EU, CH, GB, US or EU, CH, GB, US, AUS

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

Integrated power supply unit
Integrated in measuring device. 230V/50Hz standard EU. More standards e.g. GB, AUS or US 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 3 working days

Accredited calibration (DKD)
The time required for accredited calibration is 3 working days

Factory calibration (ISO)
The time required for factory calibration is 4 working days

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