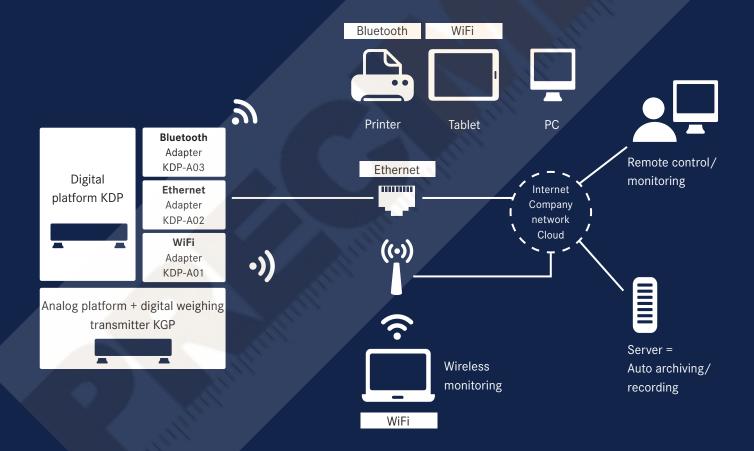
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SYSTEM SOLUTIONS INDUSTRY 4.0, EASYTOUCH



We will help to combine industrial production with the latest information and communication technology, with the aim of improving quality, reducing costs and using time and resources more efficiently so that you are able to react to future requirements in a more flexible manner. You will benefit from our uniform data protocol combined with our BalanceConnection 4.0 data software, see Software.

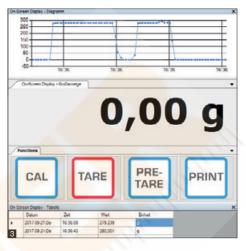












Robust industrial platform scale with digital weighing transmitter, ideal for varied range of applications for Industry 4.0

Features

- KFP V20 IP65) and digital weighing transmitter (KERN YKV-01) your weighing processes are ready for the requirements of Industry 4.0. Simply install the platform, connect the digital weighing transmitter to the network and start
- For rapid transfer of weighing data to connected networks, computers, etc.
- · USB and RS-232 data interface standard, power supply via USB interface
- · Transfer formats are freely configurable
- · Digital weighing transmitter with standard ethernet data interface on request

- · Functions: Weighing, taring
- Internal resolution 16 million divisions
- · Measuring frequency 10 Hz
- Easy configuration using the software supplied
- · KERN YKV-01: Robust plastic die-cast housing
- 2 KERN YKV-01: Suitable for wall mounting and DIN track mount (optional)
- · included with the delivery:
- Industrial platform KERN KFP
- Digital weighing transmitter KERN YKV-01
- 2 DIN rail mounting bracket for KERN YKV
- Configuration software for adjusting and managing the KERN KGP, enables the display and transfer of values, for example to a PC as well as conversion for different user programs such as SAP, Oracle etc.

Technical data

- · Weighing plate material: stainless steel
- KERN YKV-01: Overall dimensions W×D×H 100×140×36 mm
- Permissible ambient temperature -10 °C/40 °C

Accessories

- · Bluetooth data interface, KERN YKV-A02
- · WiFi interface, KERN YKV-A01
- · Ethernet data interface on request
- BalanceConnection software for flexible measured value recording or transmission, compatible with Microsoft® Excel, Access and other applications, Scope of supplies: Download link for 1 license, KERN SCD-4.0-DL

STANDARD































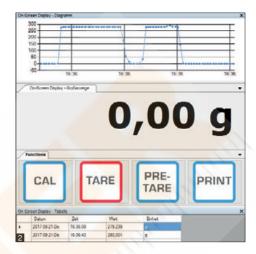


Model Weighing Readability Weighing platform Cable length Net weight Options W×D×H capacity **DAkkS Calibr. Certificate** [Max] [d] approx. approx. DAkkS **KERN** kg m kg g KERN KGP 6K-4 0,2 230×230×106 3 6 6 963-128 KGP 6K-4L 0.2 300×240×109 3 10 963-128 KGP 10K-4 15 300×240×109 0,5 3 6 963-128 KGP 10K-4L 400×300×117 15 0,5 3 10 963-128 KGP 30K-3 30 1 300×240×109 3 6 963-128 **KGP 30K-3L** 30 400×300×117 3 10 963-128 KGP 60K-3 60 2 400×300×117 3 10 963-129 KGP 60K-3L 60 2 500×400×127 3 963-129 14 KGP 100K-3 150 5 500×400×127 3 14 963-129 KGP 100K-3L 650×500×139 22 150 5 3 963-129 KGP 300K-2L 300 10 650×500×139 22 963-129











Modern digital weighing transmitter for the rapid recording of weighing data and forwarding it to the most varied output channels such as tablets, networks, SPS controllers, etc. – ideal for operating balances in systems or conveyors

Features

- Simply connect a weighing platform or measuring cell, integrate the digital weighing transmitter into the network and start weighing
- For rapid transfer of weighing data to connected networks, computers, etc.
- USB and RS-232 data interface standard, power supply via USB interface
- · Transfer formats are freely configurable
- Functions: Weighing, taring
- Measuring frequency 10 Hz
- · Easy configuration using the software supplied
- · Robust plastic die-cast housing
- Suitable for wall mounting and DIN track mount
- · Compatible with all KERN weighing platforms
- included with the delivery:
- Digital weighing transmitter KERN YKV
- USB cable incl. mains plug
- DIN rail mounting bracket
- Configuration software for adjusting and managing, enables the display and transfer of values, for example to a PC as well as conversion for different user programs such as SAP, Oracle etc.

Technical data

- Overall dimensions W×D×H 100×140×36 mm
- · Net weight approx. 0,35 kg
- Permissible ambient temperature -10 °C/40 °C

Accessories

- · Bluetooth data interface, KERN YKV-A02
- · WiFi interface, KERN YKV-A01
- BalanceConnection software for flexible measured value recording or transmission, compatible with Microsoft® Excel, Access and other applications, Scope of supplies: Download link for 1 license, KERN SCD-4.0-DL

STANDARD

















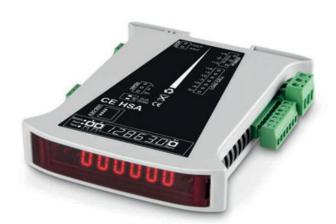


Model

Standard interfaces

| 1/ | _ | п | R.I |
|--------------|---|---|-----|
| \mathbf{r} | ᆮ | ĸ | I١ |

| YKV-01 | RS-232, USB |
|--------|-----------------------|
| YKV-02 | RS-232, USB, Ethernet |











Compact display device (rail-mounted module) for installation in switch cabinets

Features

- · Compact display unit for recording weighing data using strain gauge load cells
- It is particularly space-saving to install in switch cabinets
- · Thanks to the many interface variants, the modules can be ideally integrated into existing infrastructures and systems
- The modules can be used either individually or as a Buslink system with a total of up to 332 DIN rail modules
- Configuration of the module conveniently via a connected PC with the suitable software (Download see Internet)
- · Bright LED display for optical control and
- Time-saving G-Cal™ (Geographic Calibration) technology for fast and accurate calibration without weights conveniently over a network or the Internet worldwide
- Convenient communication via remote devices
- Backup and restore function via USB port

- Can handle various industrial protocols such as Ethernet IP, Modbus TCP, Modbus RTU, FINS, PROFIBUS DP and PROFINET (according to model)
- · Extremely high measurement frequency possible, up to 1600 data records/second
- · Internal resolution 24 Bit

Technical data

- 7 segment LED display, digit height 7,62 mm
- Dimensions W×D×H 120×101×23 mm
- · Power supply 18-32 Vdc; 4 W max.
- · Power supply load cell 5 Vdc
- Sensitivity 0,1 μV/d
- · Adjustable nominal sensitivity 1; 1.5; 2; 2.5; 3 mV/V
- Input voltage unipolar @ 3 mV/V: -1 mV to + 16 mV
- Input voltage bipolar @ 3 mV/V: -16 mV to +16 mV
- Max. load cell impedance 1200 Ω
- Min. load cell impedance 43,75 Ω
- Max. no. of load cells 350 Ω: 8
- Max. no. of load cells 1000 Ω: 22
- Max. resolution d 10.000
- Display steps 1, 2, 5, 10, 20, 50, 100, 200
- Permissible ambient temperature -10 °C/40 °C

Accessories

- · Mains adapter for voltage supply to the KERN CE, can be fitted on the DIN rail, KERN CE HSS
- · Large display with superior display size, KERN YKD-A02
- · For further accessories, such as load and load cells, torque sensors and weighing platforms (strain gauge based only) from the SAUTER and KERN range, see internet
- · Further accessories such as DIN rail, housing as well as individual assembly, configuration, adjustment, etc. on request

Note: Models optionally also available verified, please enquire













Communication Interfaces Model

Digital I/O

Analog output

KERN

| CE HSAIO* | USB | 3 input / 4 output | 0/4-20/24 mA |
|-----------|---------------------|--------------------|--------------|
| CE HSP* | USB, PROFIBUS | 3 input / 4 output | |
| CE HSR* | USB, RS-232, RS-422 | 3 input / 4 output | |
| CF HSN | USB. PROFINET | 3 input / 4 output | |

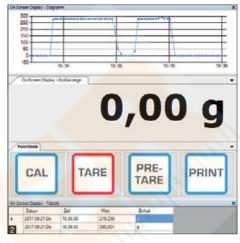












Universal weighing platforms for flexible connection in process chains

Features

- These weighing platforms can be easily integrated into your process chain. All recorded values can be easily transferred and processed further in your system as digital data and data that has already been compared using the many interfaces available. This saves cost, time and resources and ensures even more effective working
- Connecting the platform with a tablet or PC offers the advantage of being able to use the apps and programs which are on that device.
 This offers you the maximum level of flexibility when displaying, processing and saving the recorded weighing data
- KERN Communication Protocol (KCP): The KCP permits searching and remote control of the balance using external control devices or computers
- PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels
- A practical status LED informs about the active power supply

- Draught shield standard for models with weighing plate size A, weighing space W×D×H 146×146×80 mm
- 2 Software BalanceConnection for adjusting and managing the KERN KDP, for large-format display of the values collected on the PC as well as transfer of this data to other Apps and programs included with the delivery

Technical data

- · Dimensions weighing surface
- A Ø 105 mm, plastic, with conductive lacquer
- **B** W×D 160×160 mm, stainless steel, see larger picture
- Overall dimensions W×D×H 165×166×75 mm (without draught shield)
- Cable length approx. 1,2 m
- · Net weight approx. 1,2 kg
- Permissible ambient temperature 5 °C/35 °C

Accessories

- Bluetooth data interface for wireless data transfer to PC or tablets, must be ordered at purchase, KERN KDP-A03
- WiFi data interface to transfer data from balances to PC or tablet, must be ordered at purchase, KERN YMI-A01
- Ethernet data interface, to connect an IP-based Ethernet network, continuous data transfer, must be ordered at purchase, KERN KDP-A02

*WiFi and Ethernet data interface cannot be combined





















| Model | Weighing capacity | Readability | Reproducibility | Linearity | Weighing plate | Options DAkkS Calibr. Certificate |
|------------|-------------------|-------------|-----------------|-----------|----------------|------------------------------------|
| | [Max] | [d] | | | | DAkkS |
| KERN | g | g | g | g | | KERN |
| KDP 300-3 | 350 | 0,001 | 0,002 | ± 0,005 | А | 963-127 |
| KDP 3000-2 | 3500 | 0,01 | 0,02 | ± 0,05 | В | 963-127 |
| KDP 10K-4 | 10000 | 0,1 | 0,1 | ± 0,3 | В | 963-128 |
| KDP 10K-3 | 10000 | 1 | 1 | ± 3 | В | 963-128 |

WE CAN MAKE YOUR WEIGHING DATA DIGITAL – KERN EASYTOUCH

The KERN EasyTouch software combines the performance of KERN scales with the flexibility of a Windows or Android environment.

The modular system solution for efficient weighing – perfect for your individual requirements.



See for yourself the many benefits of the KERN EasyTouch Software:

- → Greater efficiency through short workflows for the user
- → Greater security of the measuring results
- → Avoiding measuring and process errors
- → Unlimited master data memory
- → Central data storage and data security (tamper-proof)
- → Interfaces to ERP, PPS, etc. systems

All details about KERN EasyTouch can be found at https://lp.kern-sohn.com/en/easytouch



consisting of platform, balance and tablet

Working with KERN EasyTouch is so easy

Collect the weight and measurement data with a device from our KERN IoT-Line

KERN EasyTouch combines and processes weights with master and product data, as well as user and time information

Supply of data to connected systems or peripheral devices



- → A standard balance from our KERN IoT-Line is connected to an external laptop/tablet
- → The performance of the balance is transferred to the terminal device 1:1
- → The expansion of the user interface enables simple and intuitive operation of the balance and direct display and processing of measurement and master data
- → The data is integrated directly in the process and this means it can continue to be used and stored
- → Errors in the process or application are avoided
- → In this way a simple balance becomes a highly-complex measuring device
- → The recorded data can be processed further in a flexible way

KERN EasyTouch - these functions are included:

- Basic program with functions including weighing and dispensing function, as well as master data and user administration
- Over 20 optional add-on functions
- Tamper-proof data storage and seamless traceability of your measurement data and changes to your master data
- On request we can also offer tailor-made solutions get in touch with us!







KERN EasyTouch App – download now from Microsoft Store® (for Windows®) or Google Play Store® (for Android TM)

Test it without any risk and free of charge – it's that easy:

1

Download KERN EasyTouch from the App Store

The free trial version contains the full range of functions.

Connect the devices you need
Connect to devices using the four interfaces provided
(Bluetooth, wired or USB adapter or WiFi).



Basic program with optional add-on functions 180-day test

During the testing phase you can decide whether to continue using the software. With absolutely no loss of data.





Possible interfaces:

- → Wired through RS 232 interface cable + USB adapter AFH 13
- → Bluetooth through KUP-06 or KUM-06
- → Ethernet through KUP-04 or KUM-04
- → WiFi through KUP-05 or KUM-05

Your benefits of the KERN EasyToch software

- \rightarrow You only pay for the functions that
- → Expansion of the range of services of your balance to meet your individual ideas and preferences
- → Easy control of your balances from wherever you currently are: laboratory, production, office control of a PC, laptop or a tablet
- → Tamper-proof storage of all weighing data on a central server, in an orderly database

KERN EasyTouch - available right now for the following KERN ranges/models

KERN Balances / Weighing platforms Stainless steel **Display Devices** KFC⁽¹⁾ SXC(1) Precision Balances 572 Platform Scales Compact Laboratory **Baby Scales** Wheelchair platform scales MBA **PCB** $MWN^{(1)}$ **Balances** BID⁽¹⁾ $UID^{(1)}$ Floor Scales Pallet Scales Chair scales MCN⁽¹⁾ KDP Personal Balances $MPN^{(1)}$ Bench Scales FCB⁽¹⁾ **Digital Platforms** DS, IFB, IFC(1), IOC(1), KGP Platform Scales **Counting Scales** CDS, CKE Digital Weighing Systems IXC(1)

(1) Verified operation: Weighing data from legally regulated uses can be stored and archived in KERN EasyTouch in conformity with standards, by using models from this product family with valid calibration and measurement value memory. This standard-compliant data storage also applies to SaveServer.

Depending on the model and connection type (USB, Bluetooth, Ethernet, WiFi), please contact KERN specifically, as there may currently still be restrictions on the possible combinations.

Tip: Other KERN ranges can be adapted to be EasyTouch compatible - keep up-to-date with the latest new on https://lp.kern-sohn.com/en/easytouch



Note: All KERN models which are EasyTouch compatible are marked with the relevant symbol in the catalogue!

EasyTouch function at a glance

Basic Package - Operating system

SET-01 EasyTouch Base

Basic Weighing & Laboratory Package

The basic package contains many useful functions such as weighing, totalizing, target dispensing and percentage weighing. As well as the local master data administration and management of the weighing results.

The basic package can be expanded at any time with additional, optional add-on functions.

Optional add-on functions



SET-07 Variable

Free variable function

Individually definable units, e.g. cable length g/m, weight per unit area g/m², etc.

SET-08 Take-Out

Take-out function

Ideal for portioning by removing from a source container

SET-11 Safety

Precision & Safety function

Scale monitoring: the MUST for the pharmaceutical sector

SET-16 Batch & Statistics

Batch measuring function with statistical analysis

Perfect function in the context of production control, for calculating averages, etc.

SET-21 Formulation

Recipe function

Recipe management, dosing aid, recipe adjustment, multiplier function, etc.

SET-22 Difference

Difference function

Monitoring of weight increase (e.g. cell growth) or weight decrease (e.g. drying) and calculation of the weight difference

SET-31 Tolerance

Tolerance weighing function

Weighing within defined limits ensures fast sorting, portioning, picking, checking

SET-32 Count

Piece-counting function

Fast counting of large quantities, avoids counting errors, saves time and money!

SET-33 Target Count

Target-counting function

For lightning-fast picking of small parts, safely supported by optical and acoustic signals

SET-17 PrePack

Production control and packaging

Perfect for use in sectors such as the food industry for weighing in accordance with pre-packaging legislation

SET-14 Individual Print

User-customised print format function

Individual positioning of print elements, form printing, paper sizes and barcode printing is possible

You can find more functions on our EasyTouch home page:



https://lp.kern-sohn.com/ en/easytouch

Central data memory



SET-10 Save-Data Server

Weight storage and Save-Server function

Central storage of weighing and measuring data in a network

SET-28 Customization Service

Service for programming

Setting up and configuring interfaces (e.g. to merchandise management, ERP or PPS) and individual customer requirements