# KERN®

# SCALES AND MEASURING INSTRUMENTS FOR THE INDUSTRY

Scales, microscopes and refractometers for industry, production, trade and quality assurance

PROFESSIONAL MEASURING

**KERN** *KXS-TM*

STABLE
ZERO
GROSS

**8.386** kg

**175**
**KERN & SOHN**
Balance manufacture in the Sauter family-owned company
250

**2019**

# KERN Pictograms

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

**Easy Touch:**
Suitable for the connection, data transmission and control through PC, tablet or smartphone

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

**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:**
**Balances:** To connect the balance to a printer, PC or other peripherals.

**Microscopes:** For direct transmitting of the picture to a PC

**Bluetooth\* data interface:**
To transfer data from the balance to a printer, PC or other peripherals

**WLAN data interface:**
**Balances:** To transfer data from the balance to a printer, PC or other peripherals.

**Microscopes:** For transmitting of the picture to a mobile display device

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

**Analog output:**
for output of an electrical signal depending on the load
(e.g. voltage 0 V – 10 V or current 4 mA – 20 mA)

**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:**
With weight, date and time. Only with KERN printers.

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

**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:**
(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.

**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, CH
B) EU, CH, GB, USA
C) EU, CH, GB, USA, AUS

**Mains adapter:**
230V/50Hz in standard version for EU. On request GB, USA or AUS version available

**Power supply:**
Integrated in balance/microscope. 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

**360° rotatable microscope head**

**Binocular Microscope:**
For the inspection with both eyes

**Trinocular Microscope:**
For the inspection with both eyes and the additional option for the connection of a camera

**LED illumination:**
Cold, energy saving and especially long-life illumination

**Incident illumination:**
For non-transparent objects

**Transmitting illumination:**
For transparent objects

**Zoom magnification:**
For stereomicroscopes

**SD card:**
For data storage

**HDMI digital camera:**
For direct transmitting of the picture to a display device

**PC software:**
To transfer the measurements from the device to a PC.

**Automatic temperature compesation:**
For measurements between 10 °C and 30 °C

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

**DAkkS calibration possible:**
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

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# Your advantages

## fast

- 24 hours delivery service for products in stock – ordered today, on its way tomorrow
- Sales & service hotline available from 8:00 am to 6:00 pm

## reliable

- Up to 3 years warranty
- Precision in weighing technology for more than 175 years

## competent

- DAkkS accreditation DIN EN ISO/IEC 17025
- Certified QM system DIN EN ISO 9001
- Authorisation for initial verification by the manufacturer 2014/31/EU
- Medical certifications DIN EN ISO 13485 and 93/42/EEC

## versatile

- One-stop shopping: from bench scales through to floor scales – everything from one supplier
- Find the product you want at www.kern-sohn.com

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**Order hotline**
+49 7433 9933-0

**Service hotline**
+49 7433 9933-199

**Calibration hotline**
+49 7433 9933-196

**Online Shop**
www.kern-sohn.com

**E-mail order**
info@kern-sohn.com

**www.kern-sohn.com**
Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary, images and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a clever test weight and balance search engine.

**Sales conditions**
- The prices are valid from 01.01.2019 – 31.12.2019. In Europe, all prices do not include the applicable V.A.T.
- Delivery conditions:
  We supply ex works from Balingen, i. e. the transport costs are invoiced separately. Delivery is usually via parcel service
- Sale or return: within 14 days of purchase
- You can find our full terms and conditions on the internet at www.kern-sohn.com/en/kern/general_terms.html

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# We weigh almost everything ... and that's not all!

**Balances & Test service catalogue**

**Medical scales catalogue**

**Microscopes & refractometers catalogue**

**SAUTER measuring equipment catalogue**

**DAkkS calibration service brochure**

# Index

**KERN scales – not scared of water at all!**

Scales used in industrial situations or the food industry are often exposed to extreme stresses and strains. Water, oils, fats, varnish, dust, dirt, flour, small parts, etc. are all natural enemies of a scale. In industries such as the chemical, pharmaceutical, food, manufacturing industries, etc. scales must be able to cope with these stresses without this affecting their performance.

For use in such harsh environmental conditions, levels of protection are defined, which specify which environmental stresses a system can be exposed to with respect to the level of contact, foreign object and moisture protection, without damage beeing caused to the unit. These levels of protection are described in the following standard: "DIN EN 60529: protecction types through housing" The IP code usually consists of a two-digit combination, which gives the relevant level of protection, e.g. IP68. The first digit specifies the protection level for contact protection and protection against foreign bodies (dust protection), the second digit is for the water and moisture protection (protection against splashes of water).

All stainless steel components of the IP65...68 protected KERN stainless steel scales are made of corrosion-resistant steel of quality class 1.4301 (DIN X5CrNi18-10). The material properties support you in your HACCP-compliant quality system.

**Lisa Haiß**
Product specialist
Scales for the food industry

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# Bench scales/Counting scales



**KERN GAB-N**

page 6

**from €**

# 225,-

## Checkweighing and portioning scale, also with EC type approval [M]

### Features

- **Compact size**, practical for small spaces
- **High mobility:** thanks to rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)
- **Weighing with tolerance range (check-weighing):** a visual and audible signal helps with portioning, dispensing or grading
- **Totalising** of weights
- **Protective working cover** included with delivery

### Technical data

- Large backlit LCD display, digit height 24 mm
- Dimensions weighing surface W×D 294×225 mm
- Overall dimensions W×D×H 320×330×125 mm
- Net weight approx. 3,0 kg
- Permissible ambient temperature
  GAB-N: 0 °C/40 °C
  GAB-DNM: -10 °C/40 °C

### Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN CFS-A02S05, **€ 40,-**
- **Rechargeable battery pack internal**, operating time up to 90 h without backlight, charging time approx. 12 h, KERN GAB-A04, **€ 40,-**

- **WiFi interface** for wireless connection of the balance to networks and WiFi capable devices, such as tablets, laptops or smartphones, must be ordered at purchase, please ask for delivery time, KERN CFS-A05, **€ 120,-**
- ▮ **Signal lamp** for visual support of weighing with tolerance range, KERN CFS-A03, **€ 250,-**
- **Y-cable** for parallel connection of two terminal devices to the RS-232 interface on the scale, e.g. signal lamp or barcode reader and printer, KERN CFS-A04, **€ 35,-**
- **Tare pan made of stainless steel**, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, **€ 55,-**
- Further details, plenty of further accessories and suitable printers see website

### Application examples

- Small industrial scale for pharmacies
- Hand mixtures of tea, coffee, chocolates
- Portioning of dough, meat, fish, poultry, mixed salads in cafeterias etc.
- Mobile weighing of freshly picked fruit on site
- Checkweigher in supermarkets
- High-precision industrial applications, piece counting or stock-taking

**Note:** Official verification duty for commercial trade

| STANDARD | | | | | | | | OPTION | | FACTORY | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CAL EXT | RS 232 | PCS | SUM | PERCENT | UNIT | TOL | MULTI | DMS | 1 DAY | ACCU | DAkkS +3 DAYS | WLAN | M +3 DAYS GAB-DNM |

| Model KERN | Weighing capacity [Max] kg | Readability [d] g | Verification value [e] g | Minimal load [Min] g | Smallest part weight [Normal] g/piece | Price excl. of VAT ex works € | Option Verification M KERN | € € | DAkkS Calibr. Certificate DAkkS KERN | € |
|---|---|---|---|---|---|---|---|---|---|---|
| GAB 6K0.05N | 6 | 0,05 | - | - | 0,5 | **295,-** ⬇ | - | - | 963-128 | 88,- |
| GAB 12K0.1N | 12 | 0,1 | - | - | 1 | **295,-** ⬇ | - | - | 963-128 | 88,- |
| GAB 30K0.2N | 30 | 0,2 | - | - | 2 | **295,-** ⬇ | - | - | 963-128 | 88,- |
| Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | | |
| Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use. | | | | | | | | | | |
| GAB 6K1DNM | 3 \| 6 | 1 \| 2 | 1 \| 2 | 20 | 2 | **225,-** ⬇ | 965-228 | 70,- | 963-128 | 88,- |
| GAB 15K2DNM | 6 \| 15 | 2 \| 5 | 2 \| 5 | 40 | 5 | **225,-** ⬇ | 965-228 | 70,- | 963-128 | 88,- |
| GAB 30K5DNM | 15 \| 30 | 5 \| 10 | 5 \| 10 | 100 | 10 | **225,-** ⬇ | 965-228 | 70,- | 963-128 | 88,- |

⬇ Price reduction

# Stainless steel bench scales KERN FOB · FOB-LM

## Stainless steel balance with special protection against humidity, also with EC-Type Approval [M]

### Features

- · **1 NEW: Innovative weighing with tolerance range (Checkweighing):** The colour of the display changes depending on the weight (too light/ok/too heavy) and is an aid to help with portioning, dosing and grading
- · **Stainless steel design** of the housing and weighing plate. Its smooth surfaces make it simple to clean
- · **High mobility:** thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (kitchen, sales office, cafeteria, Food industry-Laboratory etc.)
- · Your support in a **HACCP**-compliant quality system
- · **Secure and non-slip positioning** with rubber feet
- · **Increased protection against humidity** through waterproof silicone sealing of the load cell, electronics and soldering joints

- · **Check the weighing capacity which is in use** at the press of a button (net/gross weight)

### Technical data

- · Large backlit LCD display, digit height 25 mm
- · Dimensions weighing surface, Stainless steel
  A W×D 175×165 mm, see larger picture
  B W×D 252×200 mm
- · Overall dimensions W×D×H
  A 175×235×62 mm,
  B 220×305×80 mm
- · KERN FOB-LM: Optional battery operation, 4×1.5 V AA, standard, operating time up to 48 h, AUTO-OFF function to preserve the battery
- · Net weight
  A approx. 2,0 kg, B approx. 3,8 kg
- · Permissible ambient temperature
  A KERN FOB: 5 °C/35 °C,
  B KERN FOB-LM: -10 °C/40 °C

### Accessories

- · **Protective working cover**, scope of delivery: 5 items, KERN FOB-A13S05, **€ 40,-**
- · KERN FOB: **Rechargeable battery pack internal**, operating time up to 24 h without backlight, charging time approx. 8 h, KERN FOB-A07, **€ 45,-**
- · **Mains adapter external**, not included, can be reordered, KERN FOB-A01, **€ 35,-**
- · 2 **Tare pan made of stainless steel**, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, **€ 55,-**

STANDARD | OPTION | FACTORY

CAL EXT | TOL | IP 67 FOB-LM | BATT FOB-LM | 230 V | DMS | 1 DAY | ACCU FOB | DAkkS +3 DAYS | M +3 DAYS FOB-LM

| Model | Weighing capacity [Max] | Readability [d] | Verification value [e] | Minimal load [Min] | Weighing plate | Price excl. of VAT ex works | Option | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Verification | | DAkkS Calibr. Certificate | |
| KERN | kg | g | g | g | | € | M KERN | € | DAkkS KERN | € |
| FOB 1.5K0.5 | 1,5 | 0,5 | - | - | A | 175,- | - | - | 963-127 | 72,- |
| FOB 3K1 | 3 | 1 | - | - | A | 180,- | - | - | 963-127 | 72,- |
| FOB 6K2 | 6 | 2 | - | - | A | 175,- | - | - | 963-128 | 88,- |
| Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use. | | | | | | | | | | |
| FOB 1K-4LM NEW | 1,5 | 0,5 | 0,5 | 10 | B | 265,- | 965-227 | 55,- | 963-127 | 72,- |
| FOB 3K-3LM NEW | 3 | 1 | 1 | 20 | B | 265,- | 965-227 | 55,- | 963-127 | 72,- |
| FOB 6K-3LM NEW | 6 | 2 | 2 | 10 | B | 265,- | 965-228 | 70,- | 963-128 | 88,- |
| FOB 10K-3LM NEW | 15 | 5 | 5 | 100 | B | 265,- | 965-228 | 70,- | 963-128 | 88,- |

NEW New model

# Counting scale KERN CFS

## Professional, high-resolution counting scale with 100 item memories and second balance interface, counting resolution up to 75,000 points

### Features

- **Memory (PLU)** for 100 items with additional text, reference weight and tare weight, e.g. of a container
- **Precise counting:** The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- **Programmable using numerical key pad:**
  - required reference quantity
  - known reference weight
- **Three displays** for weight display (verifiable), reference weight, total pieces
- **Weighing with tolerance range (check-weighing):** a visual and audible signal helps with portioning, dispensing or grading
- **Fill-to-target function**
  Programmable target quantity or target weight. A signal will be displayed when the target value is reached
- **PRE-TARE function** for manual subtraction of a known container weight, useful for checking fill-levels

- **Second balance interface** to construct a high-resolution counting system, standard, e.g. with weighing bridges of KERN KFP V20
- **Protective working cover** included with delivery, for models with weighing plate size A, B

### Technical data

- Large backlit LCD displays, digit height 20 mm
- Dimensions weighing surface
  A Ø 80 mm
  B W×D 295×225 mm
  C W×D 295×225 mm
- Overall dimensions W×D×H
  A 320×350×180 mm (incl. draught shield)
  B 320×350×110 mm
  C 365×250×125 mm
- Permissible ambient temperature 0 °C/40 °C

### Accessories

- **Protective working cover**, standard for models with weighing plate size A, B, scope of delivery: 5 items, KERN CFS-A02S05, **€ 40,-**
- **Rechargeable battery pack internal**, operating time up to 70 h without backlight, charging time approx. 14 h, KERN GAB-A04, **€ 40,-**
- **Signal lamp** for visual support of weighing with tolerance range, KERN CFS-A03, **€ 250,-**
- **Y-cable** for parallel connection of two terminal devices to the RS-232 interface on the scale, e.g. signal lamp or barcode reader and printer, KERN CFS-A04, **€ 35,-**
- Further details, plenty of further accessories and suitable printers see website

**STANDARD** — CAL EXT | MEMORY | RS 232 | DUAL | SUM | TOL | MULTI | DMS | 1 DAY

**OPTION** — ACCU | +3 DAYS

**FACTORY** — WLAN

| Model KERN | Weighing capacity [Max] kg | Readability [d] g | Smallest part weight [Normal] g/piece | Counting resolution Points | Net weight approx. kg | Weighing plate | Price excl. of VAT ex works € | Option DAkkS Calibr. Certificate DAkkS KERN | € |
|---|---|---|---|---|---|---|---|---|---|
| CFS 300-3 | 0,3 | 0,001 | 0,05 | 60.000 | 2,6 | A | **360,-** | 963-127 | 72,- |
| CFS 3K-5 | 3 | 0,01 | 0,5 | 60.000 | 3,4 | B | **310,-** | 963-127 | 72,- |
| CFS 6K0.1 | 6 | 0,1 | 1 | 60.000 | 3,2 | B | **270,-** | 963-128 | 88,- |
| CFS 15K0.2 | 15 | 0,2 | 2 | 75.000 | 3,4 | B | **270,-** | 963-128 | 88,- |
| CFS 30K0.5 | 30 | 0,5 | 5 | 60.000 | 3,4 | B | **270,-** | 963-128 | 88,- |
| CFS 50K-3 | 50 | 1 | 10 | 50.000 | 4,4 | C | **295,-** ⬇ | 963-128 | 88,- |

⬇ Price reduction

# Counting system KERN CCS

## Counting system to count the smallest parts in the largest quantities, counting resolution up to 999,999 points

### Features

- The highly accurate KERN CCS counting system can replace a whole range of individual balances, efficiently and at a reasonable price

**Reference scale KERN CFS**

- This professional counting scale, which can also be used as a stand-alone scale, meets the highest demands for accuracy, weighing capacity and volume of items, by being connected to a high-capacity weighing bridge
- **Programmable using numerical key pad:**
  - required reference quantity
  - known reference weight
- **Three displays** for weight display reference weight, total pieces
- **Memory (PLU)** for 100 items with additional text, reference weight and tare weight, e.g. of a container

- **Fill-to-target function**
  Programmable target quantity or target weight. A signal will be displayed when the target value is reached
- **Precise counting:** The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- **Protective working cover** included with delivery
- **Quantity scale KERN KFP-V20 IP65, KFP-V20 IP67, KFU-V20**
- The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge) KERN CCS. In this way even the smallest of parts can be counted in large volumes
- **Weighing plate stainless steel**, painted steel base, for models with weighing plate size A – E

### Technical data

**Reference scale KERN CFS**

- Overall dimensions W×D×H 320×350×180 mm
- Dimensions weighing surface, stainless steel
  CFS 300-3: Ø 80 mm
  CFS 3K-5, CFS 6K0.1: W×D 300×225 mm
- Net weight approx. 2,6 kg
- Connection cable approx.
  A – E 2,5 m
  F – H 5 m

**Quantity platform KERN KFP-V20 IP65**

- Weighing plate dimensions W×D×H, stainless steel
  A 230×230×110 mm
  B 300×240×110 mm
  C 400×300×125 mm
  D 500×400×137 mm
  E 650×500×135 mm

**Quantity weighing bridge KERN KFP-V20 IP67**

- Weighing plate dimensions W×D×H, Lacquered steel
  F 1000×1000×80 mm
  G 1500×1250×80 mm

**Quantity pallet scale KERN KFU-V20**

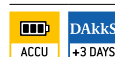- Weighing plate dimensions W×D×H, Lacquered steel
  H 840×1300×90 mm

### Accessories

- Further details, plenty of further accessories and suitable printers see website

STANDARD

| CAL EXT | MEMORY | RS 232 | DUAL | PCS | SUM | TOL | MULTI | DMS | 4 DAYS | 5 DAYS with [Max]> 600 kg |

OPTION

| ACCU | DAkkS +3 DAYS |

| Model KERN | Weighing capacity Quantity scale [Max] kg | Readability Quantity scale [d] g | Weighing plate | Weighing capacity Reference scale [Max] g | Readability Reference scale [d] g | Counting resolution Points | Smallest part weight [Normal] g/piece | Price excl. of VAT ex works € | Option DAkkS Calibr. Certificate | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | DAkkS KERN | € |
| CCS 6K-6 | 6 | 0,2 | A | 300 | 0,001 | 1.200.000 | 0,05 | 630,- ⬇ | 962-128-127 | 145,- |
| CCS 10K-6 | 15 | 0,5 | B | 300 | 0,001 | 3.000.000 | 0,05 | 660,- ⬇ | 962-128-127 | 145,- |
| CCS 30K0.01. | 30 | 1 | C | 3000 | 0,01 | 600.000 | 0,5 | 540,- ⬇ | 962-128-127 | 145,- |
| CCS 30K0.1. | 30 | 1 | C | 6000 | 0,1 | 300.000 | 1 | 490,- ⬇ | 962-128-128 | 175,- |
| CCS 60K0.01. | 60 | 2 | C | 3000 | 0,01 | 1.200.000 | 0,5 | 540,- ⬇ | 962-129-127 | 160,- |
| CCS 60K0.01L. | 60 | 2 | D | 3000 | 0,01 | 1.200.000 | 0,5 | 620,- ⬇ | 962-129-127 | 160,- |
| CCS 60K0.1. | 60 | 2 | C | 6000 | 0,1 | 600.000 | 1 | 495,- ⬇ | 962-129-128 | 175,- |
| CCS 60K0.1L. | 60 | 2 | D | 6000 | 0,1 | 600.000 | 1 | 570,- ⬇ | 962-129-128 | 175,- |
| CCS 150K0.01 | 150 | 5 | D | 3000 | 0,01 | 3.000.000 | 0,5 | 650,- ⬇ | 962-129-127 | 160,- |
| CCS 150K0.01L | 150 | 5 | E | 3000 | 0,01 | 3.000.000 | 0,5 | 860,- ⬇ | 962-129-127 | 160,- |
| CCS 150K0.1. | 150 | 5 | D | 6000 | 0,1 | 1.500.000 | 1 | 540,- ⬇ | 962-129-128 | 175,- |
| CCS 150K0.1L | 150 | 5 | E | 6000 | 0,1 | 1.500.000 | 1 | 820,- ⬇ | 962-129-128 | 175,- |
| CCS 300K0.01 | 300 | 10 | E | 3000 | 0,01 | 6.000.000 | 0,5 | 860,- ⬇ | 962-129-127 | 160,- |
| CCS 300K0.1 | 300 | 10 | E | 6000 | 0,1 | 3.000.000 | 1 | 780,- ⬇ | 962-129-128 | 175,- |
| CCS 600K-2 | 600 | 200 | F | 3000 | 0,01 | 12.000.000 | 0,5 | 1540,- ⬇ | 962-130-127 | 237,- |
| CCS 600K-2U | 600 | 200 | H | 3000 | 0,01 | 12.000.000 | 0,5 | 1490,- ⬇ | 962-130-127 | 237,- |
| CCS 1T-1L | 1500 | 500 | G | 6000 | 0,1 | 15.000.000 | 1 | 1880,- ⬇ | 962-130-128 | 253,- |
| CCS 1T-1U | 1500 | 500 | H | 6000 | 0,1 | 15.000.000 | 1 | 1430,- ⬇ | 962-130-128 | 253,- |
| CCS 3T-1 | 3000 | 1000 | G | 6000 | 0,1 | 30.000.000 | 1 | 1890,- ⬇ | 962-132-128 | 528,- |

⬇ Price reduction

# Platform scales

from €
**270,-**

# Parcel scale KERN EOE

## Parcel scales with big platform for fast and easy weighing in the office, production, dispatch etc.

### Features

- **High mobility:** thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations
- **Wall mount** for display device, standard
- **Hold function:** When the weighing conditions are unstable, a stable weight is calculated determining an average value
- **Protective working cover** over the display device, included with delivery

### Technical data

- Large LCD display, digit height 25 mm
- Weighing plate dimensions, steel, painted W×D×H
  - Ⓐ 305×315×55 mm
  - Ⓑ 550×550×57 mm, see larger picture
  - Ⓒ 950×500×55 mm
- Dimensions of display device W×D×H 235×114×51 mm
- Optional battery operation, 4×1.5 V AA not included, operating time up to 100 h
- Permissible ambient temperature 5 °C/35 °C

### Accessories

- **Protective working cover,** scope of delivery: 5 items, KERN EOB-A02S05, **€ 40,-**
- **Stand** to elevate display device, for models with weighing plate size Ⓐ, height of stand approx. 480 mm, KERN EOB-A01N, **€ 50,-**
- **Stand** to elevate display device, height of stand approx. 950 mm, KERN EOB-A02B, **€ 70,-**
- **External universal mains adapter,** with universal input and optional input socket adapters for EU, GB, USA, KERN YKA-16, **€ 40,-**

STANDARD | OPTION

CAL EXT | UNIT | MOVE | BATT | MULTI | DMS | 1 DAY | DAkkS +3 DAYS

| Model KERN | Weighing capacity [Max] kg | Readability [d] g | Reproducibility g | Weighing plate | Net weight approx. kg | Cable length approx. m | Price excl. of VAT ex works € | Option DAkkS Calibr. Certificate | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | DAkkS KERN | € |
| EOE 10K-3 | 15 | 5 | 5 | Ⓐ | 4,0 | 1,8 | **135,-** | 963-128 | 88,- |
| EOE 30K-2 | 35 | 10 | 10 | Ⓐ | 3,8 | 1,8 | **135,-** | 963-128 | 88,- |
| EOE 60K-2 | 60 | 20 | 20 | Ⓐ | 3,8 | 1,8 | **135,-** | 963-129 | 105,- |
| EOE 60K-2L | 60 | 20 | 20 | Ⓑ | 13 | 2,7 | **270,-** | 963-129 | 105,- |
| EOE 100K-2 | 150 | 50 | 50 | Ⓐ | 3,8 | 1,8 | **135,-** | 963-129 | 105,- |
| EOE 150K50L | 150 | 50 | 50 | Ⓑ | 13 | 2,7 | **270,-** | 963-129 | 105,- |
| EOE 150K50XL | 150 | 50 | 50 | Ⓒ | 18 | 2,7 | **310,-** | 963-129 | 105,- |
| EOE 300K100 | 300 | 100 | 100 | Ⓐ | 3,6 | 1,8 | **135,-** | 963-129 | 105,- |
| EOE 300K100L | 300 | 100 | 100 | Ⓑ | 13 | 2,7 | **265,-** | 963-129 | 105,- |
| EOE 300K100XL | 300 | 100 | 100 | Ⓒ | 18 | 2,7 | **310,-** | 963-129 | 105,- |

Industrial platform scale KERN EOC

Robust and high-resolution platform scale with practical
Flip/Flop display device for greatest ease of use

**Weighing instead of counting!**
Because the counting function is so easy to use, you can rapidly record large numbers of small parts – which saves time and money

**Practical Flip/Flop display device:** flexible positioning e.g. free-standing or screwed to the wall (optional). By rotating the upper housing shell you can determine the angle of the display as well as the cable outlet.
Factory Option ex works for an additional cost, delivery time + 2 working days, KERN KIB-M01, see Accessories on the right, please indicate when placing your order
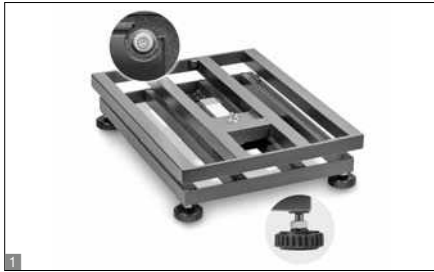
# Industrial platform scale KERN EOC







## Features

- **High mobility:** thanks to rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations (laboratory, production, quality control, commissioning etc.)
- ◻1 **Platform:** weighing plate stainless steel, painted steel base, silicone-coated aluminium load cell, protection against dust and water splashes IP65. **Level indicator and levelling feet** for precise levelling of the scale, fitted as standard, to give the most accurate weighing result
- **Weighing with tolerance range (check-weighing):** a visual and audible signal helps with portioning, dispensing or grading
- **Hold function:** When the weighing conditions are unstable, a stable weight is calculated determining an average value
- **Benchtop stand incl. wall mount** for display device as standard
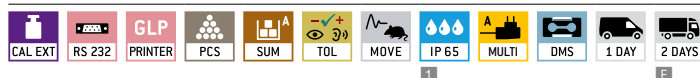- **Protective working cover** included with delivery

- **Searching and remote control of the balance** using external control devices or computers with the KERN Communication Protocol (KCP). KCP is a standardised interface command structure for KERN balances and other instruments which allows you to recall and manage all relevant parameters and device functions. You can therefore simply connect KERN devices with KCP to computers, industrial control systems and other digital systems. In a large number of cases the KCP is compatible with the MT-SICS protocol. Only possible through data interface RS-232, other interfaces on request

## Technical data

- Large backlit LCD display, digit height 24 mm
- Weighing plate dimensions W×D×H
  - Ⓐ 300×300×110 mm
  - Ⓑ 500×400×120 mm, see larger picture
  - Ⓒ 600×500×150 mm
  - Ⓓ 950×500×60 mm
- Dimensions of display device W×D×H 268×115×80 mm
- Permissible ambient temperature -10 °C/40 °C

## Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN EOC-A01S05, **€ 40,-**
- **Internal rechargable battery pack,** operating time up to 43 h without backlight, charging time approx. 3 h, KERN KFB-A01, **€ 35,-**
- **Stand** to elevate display device, height of stand approx. 330 mm, KERN EOC-A05, **€ 60,-**
- ◻3 **Mount to fasten the display device** to the platform, KERN EOC-A03, **€ 30,-**
- **Benchtop stand incl. wall mount** for display device, **Benchtop stand incl. wall mount** for display device, KERN EOC-A04, **€ 30,-**
- **Conversion of the display device,** to move the cable outlet to the front of the display device, ideal e.g. for subsequent wall installation of the display device (standard configuration ex works: rear outlet), Factory Option, delivery time + 2 working days, KERN KIB-M01, **€ 95,-**

STANDARD · OPTION

| CAL EXT | RS 232 | KCP PROTOCOL | GLP PRINTER | PCS | SUM | PERCENT | TOL | MOVE | IP 65 | MULTI | DMS | 1 DAY | ACCU | DAkkS +3 DAYS |

| Model | Weighing capacity [Max] | Readability | Smallest part weight [Normal] | Cable length | Net weight | Weighing plate | Price excl. of VAT ex works | Option DAkkS Calibr. Certificate | |
|---|---|---|---|---|---|---|---|---|---|
| **KERN** | kg | [d] g | g/piece | approx. m | approx. kg | | € | DAkkS KERN | € |
| **EOC 6K-3** | 3 \| 6 | 1 \| 2 | 2,5 | 3 | 6 | Ⓐ | **270,-** ⭣ | 963-128 | 88,- |
| **EOC 10K-3** | 6 \| 12 | 2 \| 5 | 5 | 3 | 7 | Ⓐ | **270,-** ⭣ | 963-128 | 88,- |
| **EOC 30K-3** | 15 \| 35 | 5 \| 10 | 10 | 3 | 6 | Ⓐ | **270,-** ⭣ | 963-128 | 88,- |
| **EOC 30K-3L** | 15 \| 35 | 5 \| 10 | 10 | 3 | 9 | Ⓑ | **330,-** ⭣ | 963-128 | 88,- |
| **EOC 60K-2** | 30 \| 60 | 10 \| 20 | 20 | 3 | 6 | Ⓐ | **280,-** ⭣ | 963-129 | 105,- |
| **EOC 60K-2L** | 30 \| 60 | 10 \| 20 | 20 | 3 | 9 | Ⓑ | **330,-** ⭣ | 963-129 | 105,- |
| **EOC 100K-2** | 60 \| 150 | 20 \| 50 | 50 | 3 | 6 | Ⓐ | **280,-** ⭣ | 963-129 | 105,- |
| **EOC 100K-2L** | 60 \| 150 | 20 \| 50 | 50 | 3 | 9 | Ⓑ | **330,-** ⭣ | 963-129 | 105,- |
| **EOC 100K-2XL** | 60 \| 150 | 20 \| 50 | 50 | 3 | 19 | Ⓒ | **470,-** ⭣ | 963-129 | 105,- |
| **EOC 100K-2XXL** | 60 \| 150 | 20 \| 50 | 100 | 0,7 – 2,7 | 26 | Ⓓ | **490,-** ⭣ | 963-129 | 105,- |
| **EOC 300K-2** | 150 \| 300 | 50 \| 100 | 100 | 3 | 9 | Ⓑ | **330,-** ⭣ | 963-129 | 105,- |
| **EOC 300K-2L** | 150 \| 300 | 50 \| 100 | 100 | 3 | 19 | Ⓒ | **470,-** ⭣ | 963-129 | 105,- |
| | | | | | | | | | |
| **EOC 6K-4A** | 6 | 0,5 | 2,5 | 3 | 6 | Ⓐ | **290,-** ⭣ | 963-128 | 88,- |
| **EOC 10K-3A** | 12 | 1 | 5 | 3 | 7 | Ⓐ | **290,-** ⭣ | 963-128 | 88,- |
| **EOC 20K-3A** | 24 | 2 | 10 | 3 | 6 | Ⓐ | **290,-** ⭣ | 963-128 | 88,- |
| **EOC 60K-3A** | 60 | 5 | 20 | 3 | 6 | Ⓑ | **290,-** ⭣ | 963-129 | 105,- |
| **EOC 100K-2A** | 120 | 10 | 50 | 3 | 9 | Ⓒ | **330,-** ⭣ | 963-129 | 105,- |
| Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | |
| **EOC 10K-4** | 6 \| 15 | 0,2 \| 0,5 | 5 | 3 | 7 | Ⓐ | **310,-** ⭣ | 963-128 | 88,- |
| **EOC 30K-4** | 15 \| 35 | 0,5 \| 1 | 10 | 3 | 9 | Ⓑ | **340,-** ⭣ | 963-128 | 88,- |
| **EOC 60K-3** | 30 \| 60 | 1 \| 2 | 20 | 3 | 6 | Ⓐ | **310,-** | 963-129 | 105,- |
| **EOC 60K-3L** | 30 \| 60 | 1 \| 2 | 20 | 3 | 9 | Ⓑ | **340,-** ⭣ | 963-129 | 105,- |
| **EOC 100K-3** | 60 \| 150 | 2 \| 5 | 50 | 3 | 7 | Ⓐ | **310,-** ⭣ | 963-129 | 105,- |
| **EOC 100K-3L** | 60 \| 150 | 2 \| 5 | 50 | 3 | 9 | Ⓑ | **340,-** ⭣ | 963-129 | 105,- |
| **EOC 300K-3** | 150 \| 300 | 5 \| 10 | 100 | 3 | 9 | Ⓑ | **340,-** ⭣ | 963-129 | 105,- |

⭣ Price reduction

## Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN KFB-A02S05, **€ 40,-**
- **Stand** to elevate display device, for models with weighing plate size
  Ⓐ, Ⓒ: Height of stand approx. 330 mm, KERN IFB-A01, **€ 50,-**
  Ⓓ–Ⓕ: ② Height of stand approx. 600 mm, KERN IFB-A02, **€ 60,-**
  Ⓐ–Ⓕ: Height of stand approx. 800 mm, **Stand** to elevate display device, height of stand approx. 800 mm, KERN BFS-A07, **€ 120,-**
- ③ **Rechargeable battery pack internal**, operating time up to 35 h, without backlight, charging time approx. 12 h, must be ordered at purchase, KERN KFB-A01, **€ 35,-**
- **Bluetooth data interface** for wireless data transfer to PC or tablets, must be ordered at purchase, not in combination with verification, KERN KFB-A03, **€ 130,-**
- Analogue module, must be ordered at purchase, not possible in combination with signal lamp
  0–10 V: KERN KFB-A04, **€ 95,-**
  4–20 mA: KERN KFB-A05, **€ 95,-**
- **Signal lamp** KERN CFS-A03, **€ 250,-**
- **Y-cable** for parallel connection of two terminal devices to the RS-232 interface on the scale, KERN CFS-A04, **€ 35,-**

## High-resolution industrial scale in heavy version with EC type approval [M], now also up to [Max] 600 kg

### Features

- **Tough industry standard** suitable for use in harsh industrial applications
- ① **Platform:** weighing plate stainless steel, painted steel base, silicone-coated aluminium load cell, protection against dust and water splashes IP65
- **Benchtop stand incl. wall mount** for display device as standard
- **Protective working cover** included with delivery

### Technical data

- Large backlit LCD display, digit height 52 mm
- Weighing plate dimensions, stainless steel W×D×H
  Ⓐ 230×230×110 mm, Ⓑ 300×240×110 mm
  Ⓒ 400×300×128 mm, Ⓓ 500×400×130 mm
  Ⓔ 650×500×142 mm, Ⓕ 800×600×200 mm
  Dimensions of display device W×D×H 230×230×360 mm
- Cable length of display device approx. 3 m
- Permissible ambient temperature -10 °C/40 °C

**STANDARD** / **OPTION** / **FACTORY**

CAL EXT | RS 232 | GLP PRINTER | PCS | SUM | TOL | MOVE | IP 65 | MULTI | DMS | 1 DAY | 2 DAYS | DAkkS +3 DAYS | BT 2.0 | ANALOG | ACCU | M +3 DAYS IFB-M

| Model KERN | Weighing capacity [Max] kg | Readability [d] g | Verification value [e] g | Minimal load [Min] g | Net weight approx. kg | Weighing plate | Price excl. of VAT ex works € | Option Verification M KERN | € | DAkkS Calibr. Certificate DAkkS KERN | € |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IFB 3K-4 | 3 | 0,1 | - | - | 6 | Ⓐ | **350,-** | - | - | 963-127 | 72,- |
| IFB 6K-4S | 6 | 0,2 | - | - | 6 | Ⓐ | **320,-** | - | - | 963-128 | 88,- |
| IFB 6K-4 | 6 | 0,2 | - | - | 6 | Ⓑ | **320,-** | - | - | 963-128 | 88,- |
| IFB 10K-4 | 15 | 0,5 | - | - | 6 | Ⓑ | **320,-** | - | - | 963-128 | 88,- |
| IFB 10K-4L | 15 | 0,5 | - | - | 10 | Ⓒ | **390,-** | - | - | 963-128 | 88,- |
| IFB 30K-3 | 30 | 1 | - | - | 10 | Ⓒ | **390,-** | - | - | 963-128 | 88,- |
| IFB 60K-3 | 60 | 2 | - | - | 10 | Ⓒ | **390,-** | - | - | 963-129 | 105,- |
| IFB 60K-3L | 60 | 2 | - | - | 14 | Ⓓ | **490,-** | - | - | 963-129 | 105,- |
| IFB 100K-3 | 150 | 5 | - | - | 11 | Ⓓ | **490,-** | - | - | 963-129 | 105,- |
| IFB 100K-3L | 150 | 5 | - | - | 20 | Ⓔ | **690,-** | - | - | 963-129 | 105,- |
| IFB 300K-2 | 300 | 10 | - | - | 20 | Ⓔ | **690,-** | - | - | 963-129 | 105,- |
| IFB 600K-2 | 600 | 20 | - | - | 65 | Ⓕ | **790,-** | - | - | 963-130 | 165,- |
| Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | | | |
| IFB 6K-3SM | 3 \| 6 | 1 \| 2 | 1 \| 2 | 20 \| 40 | 4,6 | Ⓐ | **350,-** | 965-228 | 70,- | 963-128 | 88,- |
| IFB 6K1DM | 3 \| 6 | 1 \| 2 | 1 \| 2 | 20 \| 40 | 6 | Ⓐ | **335,-** | 965-228 | 70,- | 963-128 | 88,- |
| IFB 15K2DM | 6 \| 15 | 2 \| 5 | 2 \| 5 | 40 \| 100 | 6 | Ⓑ | **335,-** | 965-228 | 70,- | 963-128 | 88,- |
| IFB 15K2DLM | 6 \| 15 | 2 \| 5 | 2 \| 5 | 40 \| 100 | 10 | Ⓒ | **400,-** | 965-228 | 70,- | 963-128 | 88,- |
| IFB 30K5DM | 15 \| 30 | 5 \| 10 | 5 \| 10 | 100 \| 200 | 10 | Ⓒ | **400,-** | 965-228 | 70,- | 963-128 | 88,- |
| IFB 60K10DM | 30 \| 60 | 10 \| 20 | 10 \| 20 | 200 \| 400 | 10 | Ⓒ | **410,-** | 965-229 | 93,- | 963-129 | 105,- |
| IFB 60K10DLM | 30 \| 60 | 10 \| 20 | 10 \| 20 | 200 \| 400 | 13 | Ⓓ | **505,-** | 965-229 | 93,- | 963-129 | 105,- |
| IFB 150K20DM | 60 \| 150 | 20 \| 50 | 20 \| 50 | 400 \| 1000 | 14 | Ⓓ | **490,- ⬇** | 965-229 | 93,- | 963-129 | 105,- |
| IFB 150K20DLM | 60 \| 150 | 20 \| 50 | 20 \| 50 | 400 \| 1000 | 20 | Ⓔ | **665,-** | 965-229 | 93,- | 963-129 | 105,- |
| IFB 300K50DM | 150 \| 300 | 50 \| 100 | 50 \| 100 | 1000 \| 2000 | 22 | Ⓔ | **665,-** | 965-229 | 93,- | 963-129 | 105,- |
| IFB 600K-1M | 300 \| 600 | 100 \| 200 | 100 \| 200 | 2000 \| 4000 | 65 | Ⓕ | **920,-** | 965-230 | 132,- | 963-130 | 165,- |

Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible.
Verification at the factory, we need to know the full address of the location of use.

⬇ Price reduction

# Stainless steel platform scale KERN SXS



PREMIUM ★★★


1

## Stainless steel platform scale with stainless steel IP68 display and EC type approval [M]

### Features

- **Ideal for the robust industrial applications**
- **1 Platform:** made entirely of stainless steel, silicone-coated stainless steel load cell, protection against dust and water splashes IP68. Substruction in wing design, extremely resistant to bending. Earthed weighing plate, to reduce static charge
- **Display device:** stainless steel, protection against dust and water splashes IP68, integrated power supply
- **Suitable for the ever-increasing hygienic requirements** in the food industry
- **Wall mount** for display device, standard
- **Superior display size:** digit height 55 mm, bright backlight for easy reading of weighing results, even in poor lighting conditions
- Easy-to use KERN menu structure with printout of weighing results which can be intuitively adapted

- Thanks to **interfaces** such as RS-232, RS-485 and Bluetooth (optional) the scale can easily be connected to existing networks and facilitates the data exchange between the scale and printer

### Technical data

- Large backlit LCD display, digit height 55 mm
- Weighing plate dimensions, stainless steel W×D×H
  A 300×240×86 mm
  B 400×300×89 mm
  C 500×400×123 mm
  D 650×500×133,5 mm
- Dimensions of display device W×D×H 232×170×80 mm
- Cable length of display device approx. 2,5 m

### Accessories

- **Stand** to elevate display device, must be ordered at purchase, for models with weighing plate size
  A – D Height of stand approx. 200 mm, KERN IXS-A02, **€ 70,-**
  B – D Height of stand approx. 400 mm, KERN IXS-A03, **€ 75,-**
  C – D Height of stand approx. 600 mm, KERN IXS-A04, **€ 85,-**
- **Rechargeable battery pack internal**, operating time up to 80 h without backlight, charging time approx. 12 h, must be ordered at purchase, KERN GAB-A04, **€ 40,-**
- **Data interface RS-232**, interface cable included, approx. 1,5 m, must be ordered at purchase, KERN KXS-A04, **€ 100,-**
- **Data interface RS-485**, must be ordered at purchase, KERN KXS-A01, **€ 145,-**
- **Foot switch**, must be ordered at purchase, KERN KXS-A03, **€ 130,-**
- **Bluetooth data interface** for wireless data transfer to PC or tablets, must be ordered at purchase, not in combination with verification, KERN KXS-A02, **€ 170,-**
- Further details, plenty of further accessories and suitable printers see website
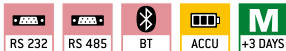
STANDARD | | | | | | | | OPTION | FACTORY
CAL EXT | GLP PRINTER | PCS | TOL | MOVE | IP 68 | 230 V | DMS | 1 DAY | DAkkS +3 DAYS | RS 232 | RS 485 | BT | ACCU | M +3 DAYS

| Model | Weighing capacity [Max] | Readability [d] | Verification value [e] | Minimal load [Min] | Linearity | Weighing plate | Price excl. of VAT ex works | Option | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Verification | | DAkkS Calibr. Certificate | |
| KERN | kg | g | g | g | g | | € | M[ ] KERN | € | DAkkS KERN | € |
| SXS 6K-3M | 3 \| 6 | 1 \| 2 | 1 \| 2 | 20 \| 40 | ± 1 \| 2 | A | 670,- ⬇ | 965-228 | 70,- | 963-128 | 88,- |
| SXS 10K-3M | 6 \| 15 | 2 \| 5 | 2 \| 5 | 40 \| 100 | ± 2 \| 5 | A | 670,- ⬇ | 965-228 | 70,- | 963-128 | 88,- |
| SXS 10K-3LM | 6 \| 15 | 2 \| 5 | 2 \| 5 | 40 \| 100 | ± 2 \| 5 | B | 820,- ⬇ | 965-228 | 70,- | 963-128 | 88,- |
| SXS 30K-2M | 15 \| 30 | 5 \| 10 | 5 \| 10 | 100 \| 200 | ± 5 \| 10 | B | 820,- ⬇ | 965-228 | 70,- | 963-128 | 88,- |
| SXS 30K-2LM | 15 \| 30 | 5 \| 10 | 5 \| 10 | 100 \| 200 | ± 5 \| 10 | C | 1110,- ⬇ | 965-228 | 70,- | 963-128 | 88,- |
| SXS 60K-2M | 30 \| 60 | 10 \| 20 | 10 \| 20 | 200 \| 400 | ± 10 \| 20 | B | 820,- ⬇ | 965-229 | 93,- | 963-129 | 105,- |
| SXS 60K-2LM | 30 \| 60 | 10 \| 20 | 10 \| 20 | 200 \| 400 | ± 10 \| 20 | C | 1110,- ⬇ | 965-229 | 93,- | 963-129 | 105,- |
| SXS 100K-2M | 60 \| 150 | 20 \| 50 | 20 \| 50 | 400 \| 1000 | ± 20 \| 50 | C | 1110,- ⬇ | 965-229 | 93,- | 963-129 | 105,- |
| SXS 100K-2LM | 60 \| 150 | 20 \| 50 | 20 \| 50 | 400 \| 1000 | ± 20 \| 50 | D | 1370,- ⬇ | 965-229 | 93,- | 963-129 | 105,- |
| SXS 300K-2M | 150 \| 300 | 50 \| 100 | 50 \| 100 | 1000 \| 2000 | ± 50 \| 100 | D | 1370,- ⬇ | 965-229 | 93,- | 963-129 | 105,- |
| Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | | | |
| Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use. | | | | | | | | | | | |

⬇ Price reduction

# Floor scales/Pallet truck scales
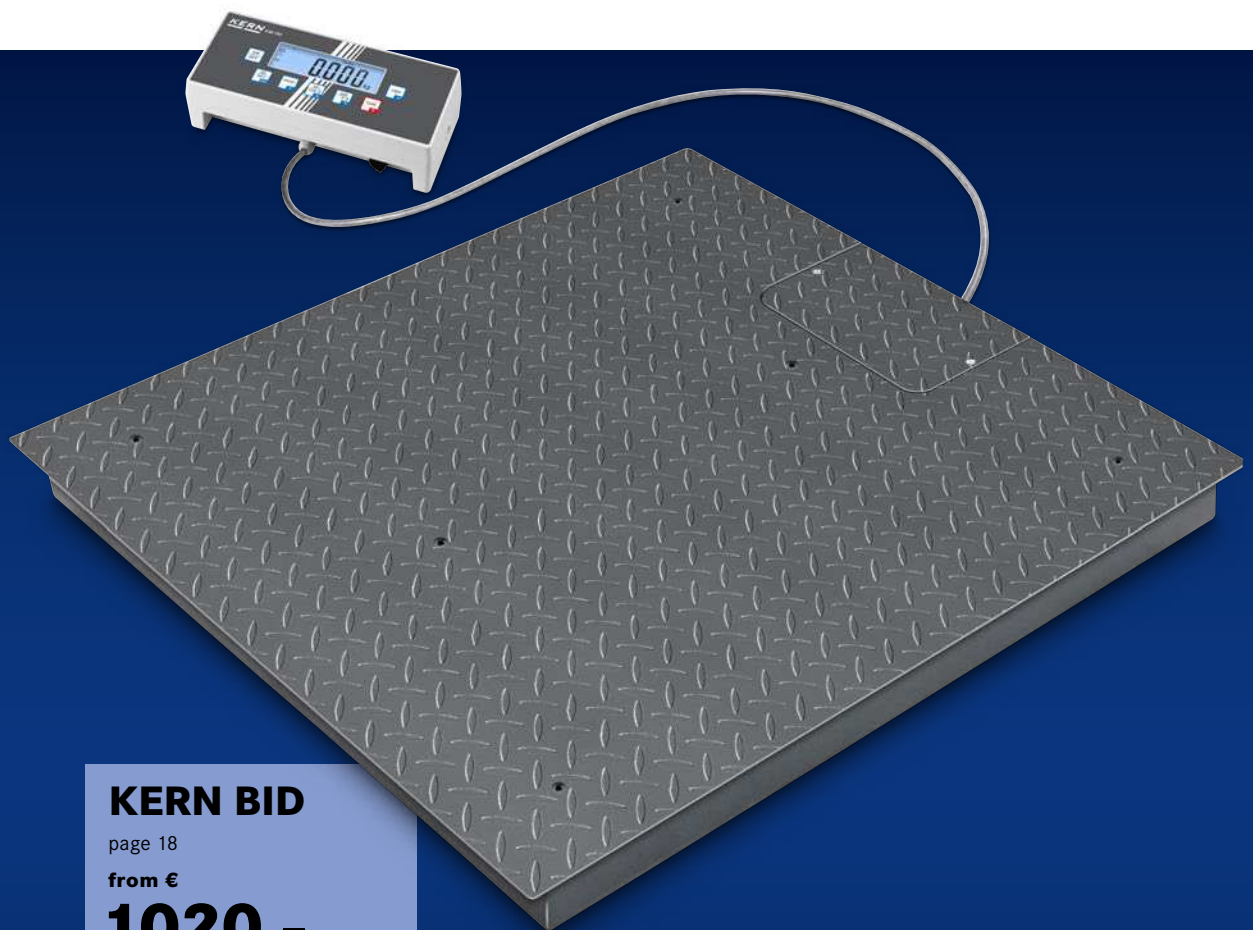


**KERN BID**
page 18
**from €**
**1020,-**

# Floor scale KERN BIC





## High resolution floor scale with 2×3000 [d] and the best price to performance ratio

### Features

- **Weighing bridge:** out of anti-slip corrugated steel, 4 silicone-coated steel load cells, dust and spray protection IP67
- Welded platform with screw holes to lift the balance for easy cleaning
- **Easy levelling of the weighing bridge** as well as **access to the junction box** from above
- **Simple and convenient 4-key operation**
- **Wall mount** for display device, standard
- A clever **plug-in connector** means that you can easily separate the display device and the platform, e.g. for installing the balance in a packing and dispatch bench, pit frame etc. at a later date
- ① Did you know? Our floor scales are delivered in a robust wooden box. This protects the high-quality weighing technology from environmental influences and stresses during transportation. KERN – always one step ahead

### Technical data

- Large LCD display, digit height 25 mm
- Weighing plate dimensions W×D×H
  - Ⓐ 1000×1000×108 mm
  - Ⓑ 1200×1500×108 mm
  - Ⓒ 1500×1500×108 mm
- Dimensions of display device W×D×H 235×114×51 mm
- Optional battery operation, 4×1.5 V AA not included, operating time up to 60 h
- Cable length of display device approx. 5 m
- Permissible ambient temperature -10 °C/40 °C

### Accessories

- **Protective working cover** over display device, delivery quantity: 5 items, KERN EOB-A02S05, **€ 40,-**
- **Pair of base plates** to fix the weighing bridge to the floor, KERN BIC-A07, **€ 40,-**
- ② **Ascending ramp**, steel, powder coated, steel, powder coated, not included, for models with weighing plate size
  - Ⓐ 1000×1000×108 mm, KERN BIC-A01, **€ 350,-**
  - Ⓑ 1200×1000×108 mm, KERN BIC-A02, **€ 380,-**
  - Ⓒ 1500×1000×108 mm, KERN BIC-A03, **€ 460,-**
- ③ **Stable pit frame**, steel, powder coated, for models with weighing plate size
  - Ⓐ 1088×1088×110 mm, KERN BIC-A04, **€ 295,-**
  - Ⓑ 1288×1588×110 mm, KERN BIC-A05, **€ 330,-**
  - Ⓒ 1588×1588×110 mm, KERN BIC-A06, **€ 350,-**

ℹ Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs

STANDARD: CAL EXT | UNIT | IP 67 | BATT | MULTI | DMS | 2 DAYS

OPTION: DAkkS +3 DAYS

| Model | Weighing capacity | Readability | Net weight | Weighing plate | Price | Option | |
|---|---|---|---|---|---|---|---|
| | | | | | excl. of VAT | DAkkS Calibr. Certificate | |
| **KERN** | [Max] kg | [d] kg | approx. kg | | ex works € | DAkkS KERN | € |
| Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | |
| BIC 600K-1S | 300 \| 600 | 0,1 \| 0,2 | 130 | Ⓐ | **750,-** 🔻 | 963-130 | 165,- |
| BIC 600K-1 | 300 \| 600 | 0,1 \| 0,2 | 150 | Ⓑ | **900,-** 🔻 | 963-130 | 165,- |
| BIC 1T-4S | 600 \| 1500 | 0,2 \| 0,5 | 130 | Ⓐ | **750,-** 🔻 | 963-130 | 165,- |
| BIC 1T-4 | 600 \| 1500 | 0,2 \| 0,5 | 150 | Ⓑ | **950,-** 🔻 | 963-130 | 165,- |
| BIC 3T-3 | 1500 \| 3000 | 0,5 \| 1 | 150 | Ⓑ | **950,-** 🔻 | 963-132 | 440,- |
| BIC 3T-3L | 1500 \| 3000 | 0,5 \| 1 | 150 | Ⓒ | **1070,-** 🔻 | 963-132 | 440,- |

🔻 Price reduction

## Technical data

- Large LCD display, digit height 25 mm
- Weighing plate dimensions W×D×H
  - Ⓐ 1000×1000×108 mm
  - Ⓑ 1200×1000×108 mm
  - Ⓒ 1200×1500×108 mm
  - Ⓓ 1500×1500×108 mm
- Dimensions of display device W×D×H 260×115×70 mm
- Cable length of display device approx. 5 m
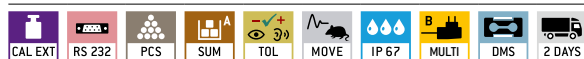- Permissible ambient temperature -10 °C/40 °C

# Floor scale with EC type approval [M]* and the best price-to-performance ratio – now also as a high-resolution dual-range scale

## Features

- **NEW:** now also available as a dual-range balance! Ideal, when high maximum loads need to be weighed, but in the lower load range you still need high resolution. This means that two balances can be replaced with one – which saves space and money!
- **BID 1T-4EM:** Compact special size, especially for weighing europallets
- ① **Weighing bridge:** out of anti-slip corrugated steel, 4 silicone-coated steel load cells, dust and spray protection IP67
- **Easy levelling of the weighing bridge** as well as **access to the junction box** from above
- ② **Display device:** for details see KERN KFB-TM
- **Totalising** of weights and piece counts
- Thanks to **interfaces** such as RS-232 or USB, WiFi, Bluetooth, Ethernet (optional), the scale can easily be connected to existing networks. Data exchange between the scale, PC or printer

- **Searching and remote control of the balance** using external control devices or computers with the KERN Communication Protocol (KCP). KCP is a standardised interface command structure for KERN balances and other instruments which allows you to recall and manage all relevant parameters and device functions. You can therefore simply connect KERN devices with KCP to computers, industrial control systems and other digital systems. In a large number of cases the KCP is compatible with the MT-SICS protocol. Only possible through data interface RS-232, other interfaces on request

## Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN EOC-A01S05, **€ 40,-**
- **Pair of base plates** to fix the weighing bridge to the floor, KERN BIC-A07, **€ 40,-**
- ③ **Ascending ramp**, steel, powder coated, steel, powder coated, for models with weighing plate size
  - Ⓐ, Ⓑ KERN BIC-A01, **€ 350,-**
  - Ⓒ KERN BIC-A02, **€ 380,-**
  - Ⓓ KERN BIC-A03, **€ 460,-**
- ④ **Stable pit frame**, steel, powder coated, to install the weighing bridge so you can drive straight on, for models with weighing plate size
  - Ⓐ KERN BIC-A04, **€ 295,-**
  - Ⓑ KERN BIC-A08, **€ 330,-**
  - Ⓒ KERN BIC-A05, **€ 330,-**
  - Ⓓ KERN BIC-A06, **€ 350,-**
- Further details, plenty of further accessories and suitable printers see website

**Note:** For verified scales the weighing bridge must be fixed to the floor. Optionally, with an access ramp, a footplate pair or a pit frame

① Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs

STANDARD / OPTION / FACTORY

| CAL EXT | RS 232 | KCP PROTOCOL | GLP PRINTER | PCS | SUM | PERCENT | TOL | MOVE | IP 65 | IP 67 | MULTI | DMS | 2 DAYS | DAkkS +3 DAYS | USB | BT 4.0 | WLAN | LAN | M +3 DAYS * |

| Model<br>KERN | Weighing capacity [Max] kg | Readability = Verification value [d] = [e] kg | Minimal load [Min] kg | Net weight approx. kg | Weighing plate | Price excl. of VAT ex works € | Option | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Verification | | DAkkS Calibr. Certificate | |
| | | | | | | | M KERN | € | DAkkS KERN | € |
| **BID 600K-1SM** | 600 | 0,2 | 4 | 130 | Ⓐ | **1020,-** ⬇ | 965-230 | 132,- | 963-130 | 165,- |
| **BID 600K-1M** | 600 | 0,2 | 4 | 150 | Ⓒ | **1250,-** ⬇ | 965-230 | 132,- | 963-130 | 165,- |
| **BID 1T-4SM** | 1500 | 0,5 | 10 | 130 | Ⓐ | **1020,-** ⬇ | 965-230 | 132,- | 963-130 | 165,- |
| **BID 1T-4M** | 1500 | 0,5 | 10 | 75 | Ⓒ | **1280,-** ⬇ | 965-230 | 132,- | 963-130 | 165,- |
| **BID 1T-4EM** | 1500 | 0,5 | 10 | 65 | Ⓑ | **1120,-** ⬇ | 965-230 | 132,- | 963-130 | 165,- |
| **BID 3T-3M** | 3000 | 1 | 20 | 150 | Ⓒ | **1290,-** ⬇ | 965-232 | 200,- | 963-132 | 440,- |
| **BID 3T-3LM** | 3000 | 1 | 20 | 150 | Ⓓ | **1450,-** | 965-232 | 200,- | 963-132 | 440,- |
| Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | | |
| **BID 600K-1DSM** NEW | 300 \| 600 | 0,1 \| 0,2 | 4 | 130 | Ⓐ | **1090,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BID 600K-1DM** NEW | 300 \| 600 | 0,1 \| 0,2 | 4 | 150 | Ⓒ | **1320,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BID 1T-4DSM** NEW | 600 \| 1500 | 0,2 \| 0,5 | 10 | 130 | Ⓐ | **1090,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BID 1T-4DM** NEW | 600 \| 1500 | 0,2 \| 0,5 | 10 | 150 | Ⓒ | **1350,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BID 3T-3DM** NEW | 1500 \| 3000 | 0,5 \| 1 | 20 | 150 | Ⓒ | **1360,-** | 965-232 | 200,- | 963-132 | 440,- |
| **BID 3T-3DLM** NEW | 1500 \| 3000 | 0,5 \| 1 | 20 | 150 | Ⓓ | **1520,-** | 965-232 | 200,- | 963-132 | 440,- |
| Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use. | | | | | | | | | | |

NEW New model    ⬇ Price reduction    * Verification not in combination with KERN KIB-A02, KIB-A03, KIB-A04, KIB-A10

## Floor scale KERN BFB






## Weighing bridge with screwed-on weighing plate (IP67) and XXL display device, with EC type approval [M]

### Features

- **Weighing plate** Ⓐ, Ⓑ **screwed on from the top**, so it's easy to remove, hygienic and easy to clean
- ❶ **Weighing bridge:** steel, painted, weighing plate size Ⓒ, Ⓓ corrugated steel plate, welded, 4 silicone-coated steel load cells, dust and spray protection IP67
- **Display device:** for details see KERN KFB-TM
- **Benchtop stand incl. wall mount** for display device as standard
- **Totalising** of weights and piece counts
- **Protective working cover** included with delivery

### Technical data

- Large backlit LCD display, digit height 52 mm
- Weighing plate dimensions W×D×H
  - Ⓐ 1000×1000×85 mm
  - Ⓑ 1500×1250×85 mm
  - Ⓒ 1500×1500×80 mm
  - Ⓓ 1500×1500×130 mm
- Dimensions of display device W×D×H 250×160×58 mm
- Cable length of display device approx. 5 m
- Permissible ambient temperature -10 °C/40 °C

### Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN KFB-A02S05, **€ 40,-**
- ❷ **Stand** to elevate display device, height of stand approx. 800 mm, KERN BFS-A07, **€ 120,-**
- **Pair of base plates** to fix the weighing bridge to the floor, for models with weighing plate size
  - Ⓐ, Ⓑ, Ⓒ KERN BFS-A06N, **€ 70,-**
  - Ⓓ KERN BFS-A10, **€ 60,-**
- ❸ **Ascending ramp**, steel, lacquered, not included, for models with weighing plate size
  - Ⓐ KERN BFS-A01N, **€ 310,-**
  - Ⓑ KERN BFS-A02N, **€ 350,-**
  - Ⓒ KERN BFS-A09, **€ 410,-**
  - Ⓓ KERN BFS-A11, **€ 500,-**
- ❹ **Stable pit frame**, steel, lacquered, for models with weighing plate size
  - Ⓐ KERN BFS-A03N, **€ 310,-**
  - Ⓑ KERN BFS-A04N, **€ 370,-**
  - Ⓒ KERN BFS-A08, **€ 365,-**
- **Rechargeable battery pack internal**, operating time up to 35 h without backlight, charging time approx. 10 h, must be ordered at purchase, KERN KFB-A01, **€ 35,-**

- **Bluetooth data interface** for wireless data transfer to PC or tablets, must be ordered at purchase, not in combination with verification, not possible in combination with RS-232 data interface, KERN KFB-A03, **€ 130,-**
- Analogue module, must be ordered at purchase, not possible in combination with signal lamp
  0–10 V: KERN KFB-A04, **€ 95,-**
  4–20 mA: KERN KFB-A05, **€ 95,-**
- **Signal lamp** for visual support of weighing with tolerance range, KERN CFS-A03, **€ 250,-**
- **Large display with superior display size**, KERN YKD-A02, **€ 220,-**
- **Cable with special length** 15 m, between display device and platform, for verified models which must be ordered at the time of purchase, KERN BFB-A03, **€ 160,-**
- Further details, plenty of further accessories and suitable printers see website

**Note:** For verified scales the weighing bridge must be fixed to the floor. Optionally, with an access ramp, a footplate pair or a pit frame

❗ Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs

**STANDARD** | CAL EXT | RS 232 | PCS | SUM | TOL | MOVE | IP 67 ❶ | MULTI | DMS | 2 DAYS **OPTION** DAkkS +3 DAYS **FACTORY** BT 2.0 | ANALOG | ACCU | M +3 DAYS

| Model KERN | Weighing capacity [Max] kg | Readability = Verification value [d] = [e] kg | Minimal load [Min] kg | Net weight approx. kg | Weighing plate | Price excl. of VAT ex works € | Option Verification Ⓜ KERN | € | Option DAkkS Calibr. Certificate DAkkS KERN | € |
|---|---|---|---|---|---|---|---|---|---|---|
| **BFB 600K-1SNM** | 600 | 0,2 | 4 | 105 | Ⓐ | **1100,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BFB 600K-1NM** | 600 | 0,2 | 4 | 135 | Ⓑ | **1480,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BFB 1T-4SNM** | 1500 | 0,5 | 10 | 100 | Ⓐ | **1110,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BFB 1T-4NM** | 1500 | 0,5 | 10 | 135 | Ⓑ | **1480,-** | 965-230 | 132,- | 963-130 | 165,- |
| **BFB 3T-3NM** | 3000 | 1 | 20 | 135 | Ⓑ | **1480,-** | 965-232 | 200,- | 963-132 | 440,- |
| **BFB 3T1LM** | 3000 | 1 | 20 | 155 | Ⓒ | **1700,-** | 965-232 | 200,- | 963-132 | 440,- |
| **BFB 6T-3M** | 6000 | 2 | 40 | 210 | Ⓓ | **1950,-** | 965-232 | 200,- | 963-132 | 440,- |

Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.

# Pallet scale KERN UIB
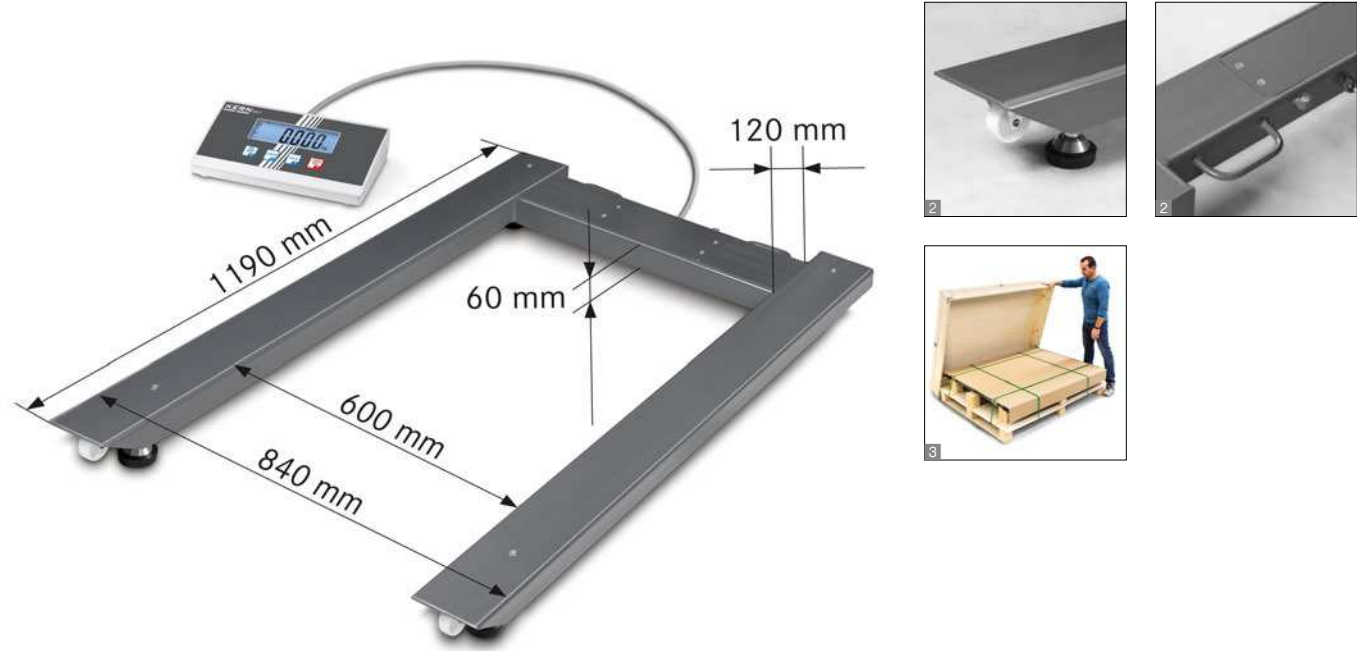


## Pallet scale with steel load support (IP67) and the best price-to-performance ratio

### Features

- **High mobility:** thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations
- **1 Load support:** steel, powder coated, 4 silicone-coated aluminium load cells, protection against dust and water splashes IP67
- **2** The scale can be easily transported using **rollers** and a **handle** and does not require much storage space
- **Totalising** of weights and piece counts
- **Protective working cover** included with delivery
- **3** Did you know? Our floor scales are delivered in a robust wooden box. This protects the high-quality weighing technology from environmental influences and stresses during transportation. KERN – always one step ahead

### Technical data

- Large LCD display, digit height 25 mm
- Dimensions of display device W×D×H 235×115×52 mm
- Cable length of display device approx. 5 m
- Optional battery operation, 4×1.5 V AA not included, operating time up to 60 h
- Net weight approx. 55 kg
- Permissible ambient temperature -10 °C/40 °C

### Accessories

- **Protective working cover** over the display device, scope of delivery: 5 items, KERN EOB-A04BS05, **€ 40,-**
- **Stand** to elevate display device, height of stand approx. 950 mm, KERN EOB-A02B, **€ 70,-**

STANDARD

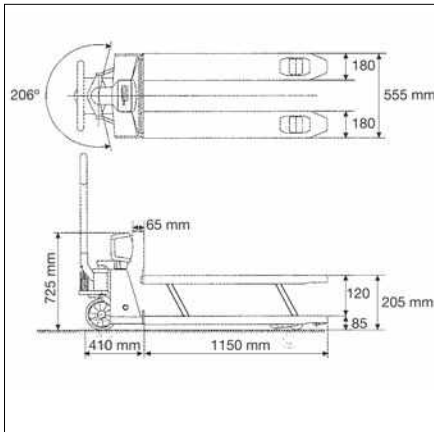| CAL EXT | UNIT | MOVE | IP 67 | BATT | MULTI | DMS | 2 DAYS |

1

OPTION

DAkkS +3 DAYS

| Model | Weighing capacity | Readability | Net weight | Price excl. of VAT | Option DAkkS Calibr. Certificate | |
|---|---|---|---|---|---|---|
| **KERN** | [Max] kg | [d] kg | approx. kg | ex works € | **DAkkS** KERN | € |
| **UIB 600K-1** | 600 | 0,2 | 55 | **740,-** | 963-130 | 165,- |
| **UIB 1.5T-4** | 1500 | 0,5 | 55 | **740,-** | 963-130 | 165,- |
| **UIB 3T-3** | 3000 | 1 | 55 | **740,-** | 963-132 | 440,- |

# Pallet truck scale KERN VHB



**PREMIUM ★★★**





## Pallet truck scale with complete protection against dust and water splashes IP65/67 and a memory for a container weight

### Features

- **PRE-TARE function** for manual subtraction of a known container weight, useful for checking fill-levels
- 1 **Display device:** plastic, protection against dust and water splashes IP65
- 2 **Load fork:** Protection against dust and water splashes IP67, temporary use in wet areas possible
- **Pivot range 206°**
- **Castors:** Solid rubber on aluminium rims
- 3 **Load rollers:** Tandem tyres to overcome thresholds and obstacles more easily
- **Totalising** of weights
- **Ready for use:** Batteries included, 4×1.5 V AA, operating time up to 80 h

### Technical data

- Large LCD display, digit height 28 mm
- Permissible ambient temperature -10 °C/40 °C

### Accessories

- Castors made of red polyurethane on aluminium rims. Ideal for light-coloured flooring as they leave less visible abrasive marks. Suitable for the current models of the pallet truck scale ranges KERN VHB, KERN VHS (when retrofitting, please give the serial number of the pallet truck scale available when ordering), scope of delivery: 1 item, KERN VHB-A02, **€ 160,-**

⚠ Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping

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**STANDARD**

| CAL EXT | SUM | UNIT | IP 65 | IP 67 | BATT | DMS | 2 DAYS |

**OPTION**

| DAkkS +3 DAYS |

| Model | Weighing capacity | Readability | Net weight | Price | Option |
|---|---|---|---|---|---|
| | | | | excl. of VAT | DAkkS Calibr. Certificate |
| | [Max] | [d] | approx. | ex works | DAkkS |
| **KERN** | kg | kg | kg | € | KERN | € |
| **VHB 2T1** | 2000 | 1 | 110 | **1310,-** ⬇ | 963-131 | 220,- |

⬇ Price reduction

# Hanging scales

**KERN HCD**
page 23
**from €**
**195,-**

# Crane scale KERN HCD



NEW





## High-resolution hanging scale for loads up to 300 kg

### Features

- **NEW: Fully-equipped crane scale** for low to medium load ranges. The solid design guarantees that extra level of safety (TÜV tested). Thanks to the large LCD display and the remote control which is delivered as standard, it can also be operated safely from a distance and results can be read off
- ① With the **TÜV certification mark**, the scale meets the requirements of the standard EN 13155 (Non-fixed load lifting attachments/ Breakage resistance) and EN 61010-1 (Electrical safety)
- **High mobility:** thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)
- **Hold function:** When the weighing value remains unchanged the weight indicated on the display is automatically "frozen" until the Hold key is pressed

- **Tare:** Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed
- Batterie charge status indication visualised through LED
- Large high-contrast display that is easy to read
- Standby function: display automatically switched off a er 5 min without a change of load. Automatic activation with the touch of a key
- **Hook with safety catch**, revolving
- Shackle and safety catch made of nickel-plated steel
- ② **Infrared remote control** standard. Range up to 20 m. All functions can be selected. W×D×H 65×24×100 mm. Batteries included

### Technical data

- LCD display, digit height 28 mm
- Batteries included, 4×1.5 V AA, operating time up to 100 h
- Precision: 0,2 % of [Max]
- Permissible ambient temperature 5 °C/35 °C

STANDARD

CAL EXT | UNIT | BATT | DMS | 1 DAY

OPTION

DAkkS +3 DAYS

| Model | Weighing capacity [Max] | Readability [d] | Net weight approx. | ③ Dimensions | | | | | | | Price excl. of VAT ex works | Option DAkkS Calibr. Certificate | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **KERN** | kg | g | kg | A mm | B mm | C mm | D mm | E mm | F mm | G mm | € | DAkkS KERN | € |
| **HCD 60K-2** | 60 | 20 | 0,85 | 194 | 79,3 | 97,7 | 276,5 | 246,5 | 26 | 23,5 | **195,-** | 963-129H | 105,- |
| **HCD 100K-2** | 150 | 50 | 0,85 | 194 | 79,3 | 97,7 | 276,5 | 246,5 | 26 | 23,5 | **195,-** | 963-129H | 105,- |
| **HCD 300K-1** | 300 | 100 | 0,85 | 194 | 79,3 | 97,7 | 276,5 | 246,5 | 26 | 23,5 | **195,-** | 963-129H | 105,- |
| Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | | | | | |
| **HCD 100K-2D** | 60 \| 150 | 20 \| 50 | 0,85 | 194 | 79,3 | 97,7 | 276,5 | 246,5 | 26 | 23,5 | **205,-** | 963-129H | 105,- |
| **HCD 300K-2D** | 150 \| 300 | 50 \| 100 | 0,85 | 194 | 79,3 | 97,7 | 276,5 | 246,5 | 26 | 23,5 | **205,-** | 963-129H | 105,- |

# Crane scale KERN HFD









## Robust, high-resolution crane scale up to 12 t

### Features

- [1] With the **TÜV certification mark**, the scales meet the requirements of the standard EN 13155 (Non-fixed load lifting attachments/Breakage resistance) and EN 61010-1 (Electrical safety)
- **Because of its stable construction and robust design**, it is ideal for continuous use in industrial environment
- **High mobility:** thanks to rechargeable battery operation, compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)
- **Hold function:** When the weighing value remains unchanged the weight indicated on the display is automatically "frozen" until the Hold key is pressed
- **Tare:** Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed
- **Solid shackles,** non-revolving
- [2] **Radio remote control** standard. Range up to 20 m. All functions can be selected (excl. ON/OFF). W×D×H 65×24×100 mm. Batteries included, 1× 12 V 23A

### Technical data

- **Superior display size:** digit height 30 mm, bright backlight for easy reading of weighing results, even in poor lighting conditions
- Rechargeable battery pack internal, operating time up to 70 h, battery pack accessible from the outside, which means it is easy to replace
- Precision: 0,2 % of [Max]
- Permissible ambient temperature -10 °C/40 °C

### Accessories

- **Rechargeable battery pack internal** for load support, operating time up to 70 h, without backlight, charging time approx. 12 h, KERN HFD-A04, **€ 65,-**
- [3] Hook with safety catch, cast steel, galvanised and lacquered, non-revolving, suitable for models
  HFD 600, HFD 1T: KERN HFD-A01, **€ 40,-**
  HFD 3T: KERN HFD-A02, **€ 55,-**
  HFD 6T, HFD 10T: KERN HFD-A03, **€ 95,-**

STANDARD | OPTION

CAL EXT | ACCU | MULTI | DMS | 1 DAY | DAkkS +3 DAYS

| Model | Weighing capacity | Readability | Net weight approx. | [4] Dimensions | | | | | | Price excl. of VAT ex works | Option DAkkS Calibr. Certificate | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **KERN** | [Max] kg | [d] g | kg | A mm | B mm | C mm | D mm | E mm | F = G mm | € | DAkkS KERN | € |
| Triple range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | | | | |
| **HFD 600K-1** | 150 \| 300 \| 600 | 50 \| 100 \| 200 | 9 | 194 | 129 | 145 | 421 | 383 | 50,8 | **370,-** | 963-130H | 165,- |
| **HFD 1T-4** | 300 \| 600 \| 1500 | 100 \| 200 \| 500 | 9 | 194 | 129 | 145 | 421 | 383 | 50,8 | **390,-** | 963-130H | 165,- |
| **HFD 3T-3** | 600 \| 1500 \| 3000 | 200 \| 500 \| 1000 | 10 | 194 | 129 | 145 | 421 | 383 | 50,8 | **620,-** | 963-132H | 500,- |
| **HFD 6T-3** | 1500 \| 3000 \| 6000 | 500 \| 1000 \| 2000 | 15 | 194 | 129 | 145 | 477 | 426 | 68,3 | **650,-** | 963-132H | 500,- |
| **HFD 10T-3** | 3000 \| 6000 \| 12000 | 1000 \| 2000 \| 5000 | 20 | 194 | 129 | 145 | 573 | 510 | 82,5 | **790,-** | 963-133H | 700,- |

# System solutions Industry 4.0

**KERN KTA-T**
page 29
only €
**400,–**

Bluetooth · WLAN
Printer · Tablet · Smartphone · PC

Digital platform KDP

**Bluetooth** Adapter KDP-A03
**Ethernet** Adapter KDP-A02
**WLAN** Adapter KDP-A01

Analog platform + A/D converter box KGP

Ethernet

Internet Company network Cloud

Remote control/ monitoring

Server = Auto archiving/ recording

Wireless monitoring

WLAN
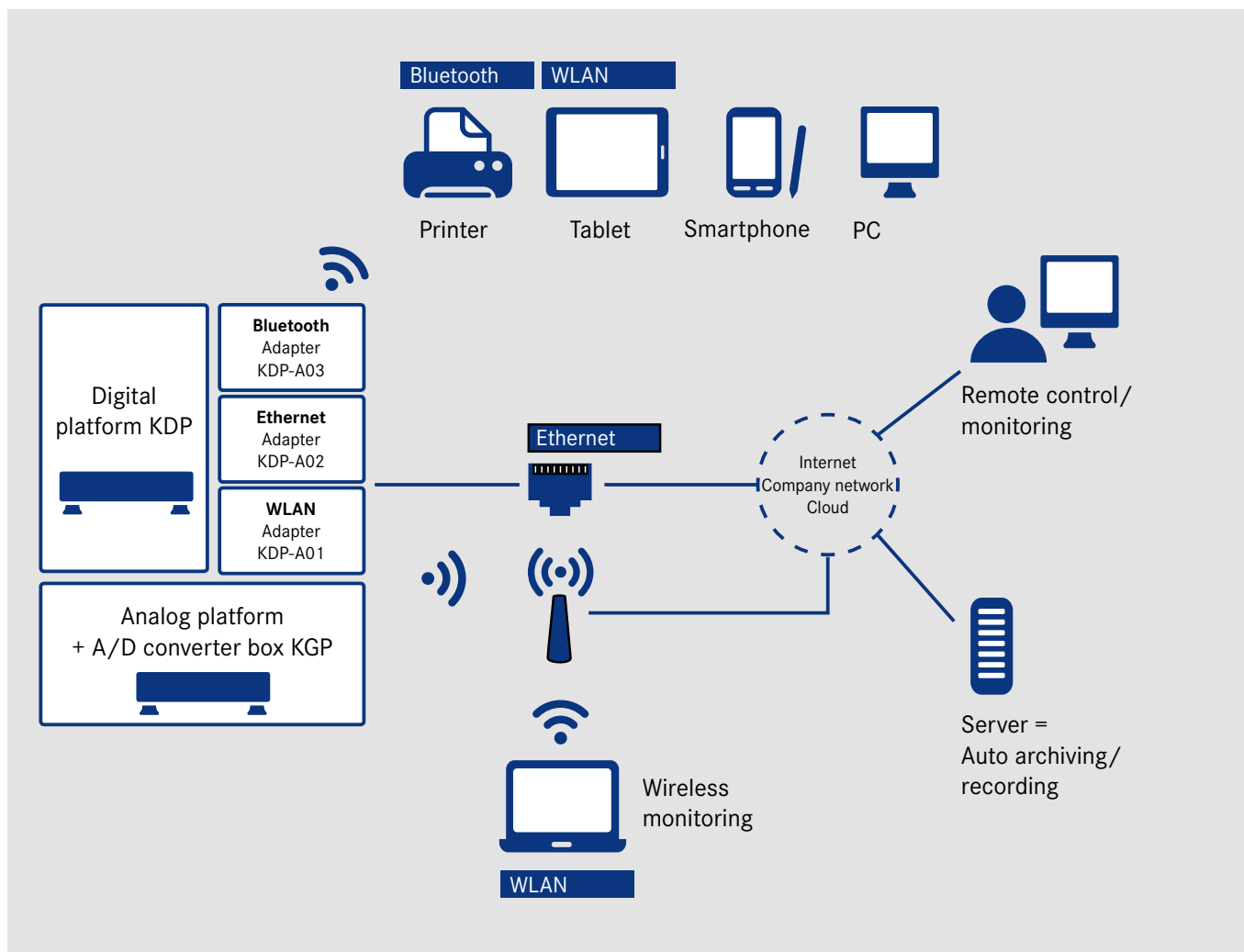
**Increased efficiency is the key to greater success in ever tightening markets**

This inevitably leads to increased pressure on employees in laboratories, clinics, industrial or service companies – more and more tasks must be carried out in less and less time. Often, this can only happen if it is possible to automate processes either in part or fully.

To do this we process the measuring and weighing data which has been collected digitally and transfer it to the relevant software applications in the right format for that particular user, i.e. the user software receives the measuring and weighing data in the format required for processing. To do this, as well as powerful hardware components, we use the KERN BalanceConnection multi-function software, which, in its PRO version, has been further enhanced to give an even greater range of functions. The competent team from our "Industry 4.0 centre" of expertise will be happy to help you integrate your KERN balances.

In a further step we offer users of KERN balances a wealth of EasyTouch Apps, which shapes the user-specific application into an intuitive workflow and thus guides you through the process, efficiently and reliably. This applies to chemical or biological laboratory tests just as it does to industrial and production processes in manufacturing industries or in the manufacture of food products or pharmaceutical products.

The KERN EasyTouch Apps in combination with the relevant hardware, such as, for example, with a Smartphone, tablet or PC and a balance, make your apparently simple balance into a high-tech instrument with integrated workflow and database software, which works in conjunction with other balances, network systems and database servers.

This modular software/hardware architecture creates extremely efficient weighing systems, which are customised to your own particular requirements and which can grow with you and your increasing requirements. Ask the team from our "Industry 4.0 centre of expertise", they will be happy to help you with any questions related to application solutions/software.

# Industrial platform scale with A/D converter box KERN KGP

**NEW**



Sim. to illustration
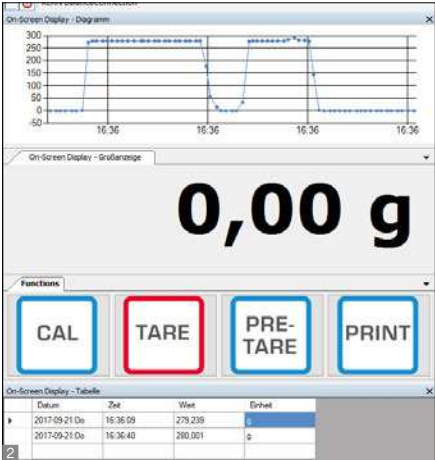


## Robust industrial platform scale with A/D converter box, ideal for varied range of applications for Industry 4.0

### Features

- With this **combination of ⬛ platform (KERN KFP V20 IP65) and A/D converter box (KERN YKV-01)** your weighing processes are ready for the requirements of Industry 4.0. Simply install the platform, connect the A/D converter box to the network and start weighing
- For rapid transfer of weighing data to connected networks, computers, etc.
- USB and RS-232 data interface standard
- Transfer formats are freely configurable
- Many interface variants available WiFi data interface, KERN YKV-A01, **€ 60,-** Bluetooth data interface, KERN YKV-A02, **€ 60,-** Other interfaces on request. A/D converter box with standard Ethernet data interface on request
- Functions: Weighing, taring

- Internal resolution 16 million divisions
- Measurement frequency 10 Mz
- Easy configuration using the software supplied
- KERN YKV-01: Robust plastic die-cast housing
- KERN YKV-01: Suitable for wall mounting and DIN track mount
- Included with delivery:
  - Industrial platform KERN KFP
  - A/D converter box KERN YKV-01
  - ② Configuration software 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. The displayed result can therefore be converted to any format for communication with the different user programs, such as, for example, e.g. SAP, Oracle etc.

### Technical Data

- Weighing plate material stainless steel
- KERN YKV-01: Overall dimensions W×D×H 100×127×28 mm
- Permissible ambient temperature -10 °C/ 40 °C

### Accessories

- **Software BalanceConnection,** flexible recording or transfer of measurements, particularly to Microsoft® Excel or Access as well as transfer of this data to other Apps and programs. The displayed result can therefore be converted to any format for communication with the different user programs, such as, for example, e.g. SAP, Oracle etc., for details see page 12, KERN SCD-4.0, **€ 150,-**

**STANDARD**

| CAL EXT | RS 232 | USB | KCP PROTOCOL | UNIT | IP 65 | DMS | 1 DAY |

**OPTION** — DAkkS +3 DAYS

**FACTORY** — BT 4.0 | WLAN

| Model | Weighing capacity | Read-out | Weighing plate | Cable length | Net weight approx. | Price excl. of VAT ex works | Options DAkkS Calibr. Certificate | |
|---|---|---|---|---|---|---|---|---|
| **KERN** | [Max] kg | [d] g | mm | m | kg | € | DAkkS KERN | € |
| **KGP 6K-4** | 6 | 0,2 | 300×240×120 | 3 | 6 | **430,-** | 963-128 | 88,- |
| **KGP 6K-4L** | 6 | 0,2 | 400×300×128 | 3 | 10 | **450,-** | 963-128 | 88,- |
| **KGP 10K-4** | 15 | 0,5 | 300×240×120 | 3 | 6 | **450,-** | 963-128 | 88,- |
| **KGP 10K-4L** | 15 | 0,5 | 400×300×128 | 3 | 10 | **490,-** | 963-128 | 88,- |
| **KGP 30K-3** | 30 | 1 | 300×240×120 | 3 | 6 | **450,-** | 963-128 | 88,- |
| **KGP 30K-3L** | 30 | 1 | 400×300×128 | 3 | 10 | **490,-** | 963-128 | 88,- |
| **KGP 60K-3** | 60 | 2 | 400×300×128 | 3 | 10 | **520,-** | 963-129 | 105,- |
| **KGP 60K-3L** | 60 | 2 | 500×400×137 | 3 | 13 | **580,-** | 963-129 | 105,- |
| **KGP 100K-3** | 150 | 5 | 500×400×137 | 3 | 14 | **580,-** | 963-129 | 105,- |
| **KGP 100K-3L** | 150 | 5 | 650×500×142 | 3 | 22 | **780,-** | 963-129 | 105,- |
| **KGP 300K-2L** | 300 | 10 | 650×500×142 | 3 | 22 | **780,-** | 963-129 | 105,- |

A/D converter box KERN YKV-01



**NEW**
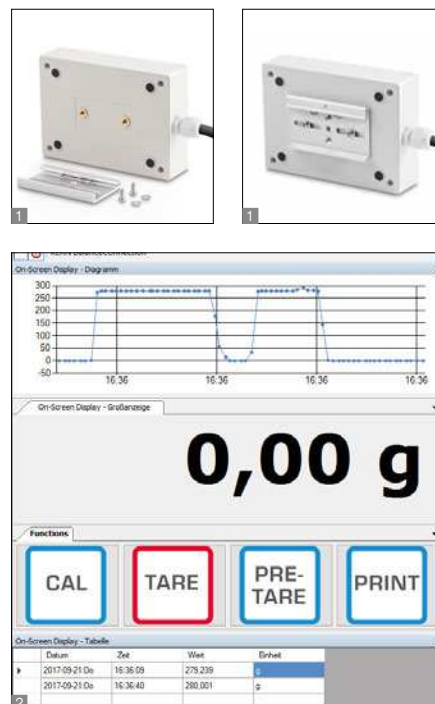




Modern A/D converter for the rapid recording of weighing data and forwarding it to the most varied output channels such as tablets, networks, SPS controllers, etc. – ideal for operating balances in systems or conveyors

## Features

- With this A/D converter box your weighing processes are ready for the requirements of Industry 4.0. Simply connect a weighing platform or measuring cell, integrate the A/D converter box into the network and start weighing
- For rapid transfer of weighing data to connected networks, computers, etc.
- USB and RS-232 data interface standard
- Transfer formats are freely configurable
- Many interface variants available
  WiFi data interface, KERN YKV-A01, **€ 60,-**
  Bluetooth data interface, KERN YKV-A02, **€ 60,-**
  Other interfaces on request. A/D converter box 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

- Robust plastic die-cast housing
- 1 Suitable for wall mounting and DIN track mount
- Compatible with all KERN weighing platforms
- Included with delivery:
  - Industrial platform KERN KFP
  - A/D converter box KERN YKV-01
  - 2 Configuration software 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. The displayed result can therefore be converted to any format for communication with the different user programs, such as, for example, e.g. SAP, Oracle etc.

**Price** excl. of VAT ex works,
KERN YKV-01, **€ 190,-**

## Technical Data

- Overall dimensions W×D×H 100×127×28 mm
- Net weight approx. 1,2 kg
- Permissible ambient temperature -10 °C/40 °C

## Accessories

- **Software BalanceConnection,** flexible recording or transfer of measurements, particularly to Microsoft® Excel or Access as well as transfer of this data to other Apps and programs. The displayed result can therefore be converted to any format for communication with the different user programs, such as, for example, e.g. SAP, Oracle etc., for details see page 12, KERN SCD-4.0, **€ 150,-**

STANDARD

| CAL EXT | RS 232 | USB | KCP PROTOCOL | GLP PRINTER | UNIT | 1 DAY |

FACTORY

| WLAN | BT 4.0 |

# Tablet KERN KTA-T · KTB-T



**NEW**

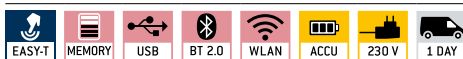**KERN KTA-T, € 400,-** (on request)



**NEW**

**KERN KTB-T, € 1290,-** (on request)



1    2    2

3    4

## Convert your balance into a computer!

This modern tablet transforms your weighing components into a powerful measuring system with a wide variety of analysis options in an instant. Simply download the appropriate app on the tablet and process the weighing data according to your ideas. Thanks to this modular concept, the initial investment is kept to a minimum and, at the same time, offers you a high level of investment security and future reliability. If your requirements should increase or your area of work should expand, then simply download more Apps. In this way the investment remains predictable and you do not pay for functions which you do not need – pretty smart!

STANDARD

| EASY-T | MEMORY | USB | BT 2.0 | WLAN | ACCU | 230 V | 1 DAY |

STANDARD

| EASY-T | RS 232 | USB | BT 2.0 | WLAN | LAN | PRINTER | GLP | IP 64 | 230 V | 1 DAY |

## KERN KTA-T – Multifunctional tablet for connection to digital platforms, balances, measuring cells

### Features

- Ideal for use in the laboratory environment, industry, test laboratories, etc., either as permanently fixed large display for one balance or as mobile display for one or more scales using WLAN or Bluetooth
- 1 Compact, slim tablet
- Superior display size in comparison with a standard display on a balance
- Separate connection for power supply, so, when charging, the USB connection remains free for USB sticks, peripheral devices, etc.
- MicroUSB to connect peripheral devices, can also be used for power supply
- For further information and extensive accessories, please see www.kern-sohn.com/de/KTA-T

### Accessories

- 2 Aluminum tablet stand, infinitely adjustable in inclination for ergonomic reading and operation of the tablet, the tablet can be set upright and transversely, rubberized contact points ensure a non-slip grip and protect the tablet, W×D×H 100×35×85 mm, KERN YKD-A03, **€ 20,-**

## KERN KTB-T – Robust professional tablet for demanding weighing applications

### Features

- Ideal for use in the laboratory environment, pharmaceutical field, industry, test laboratories, etc., either as permanently fixed large display for one balance or as mobile display for one or more scales using WLAN or Bluetooth
- Wide range: can be connected to a variety of balances, from the analytical balance to the floor scale, thus particularly comfortable management of the weighing systems used
- High-quality industrial tablet
- Superior display size in comparison with a standard display on a balance
- 3 Separate connection for power supply, so, when charging, the USB connection remains free for USB sticks, peripheral devices, etc.
- A large number of standard integrated interfaces allow the parallel connection of peripheral devices, storage media, network connections, etc.
- 4 Octopus cable as standard, allows the parallel connection of up to 5 peripheral devices, networks, etc. with only one interface
- MicroUSB for connecting peripheral devices as well as integrated VESA mounting preparation for mounting the tablet to a wide variety of standard mounts, tripods etc. as standard
- For further information and extensive accessories, please see www.kern-sohn.com/de/KTB-T

## KERN **Software BalanceConnection** SCD-4.0 Pro

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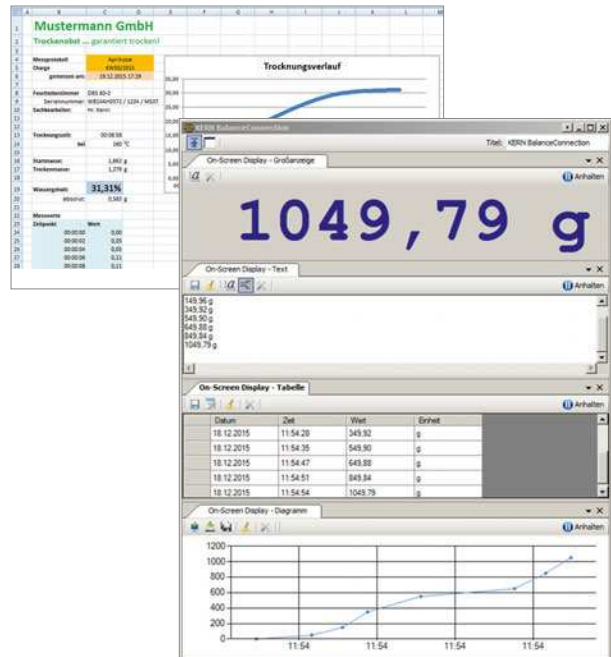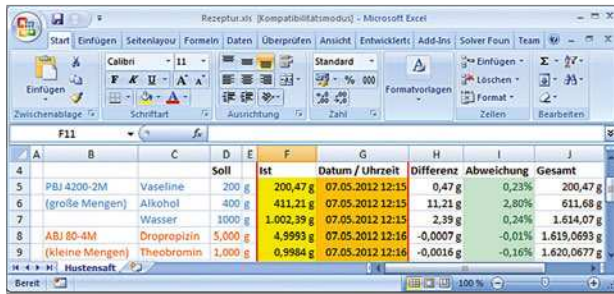
# Professional and highly flexible recording or transmission of measured values, in particular also to Microsoft® Excel or Access
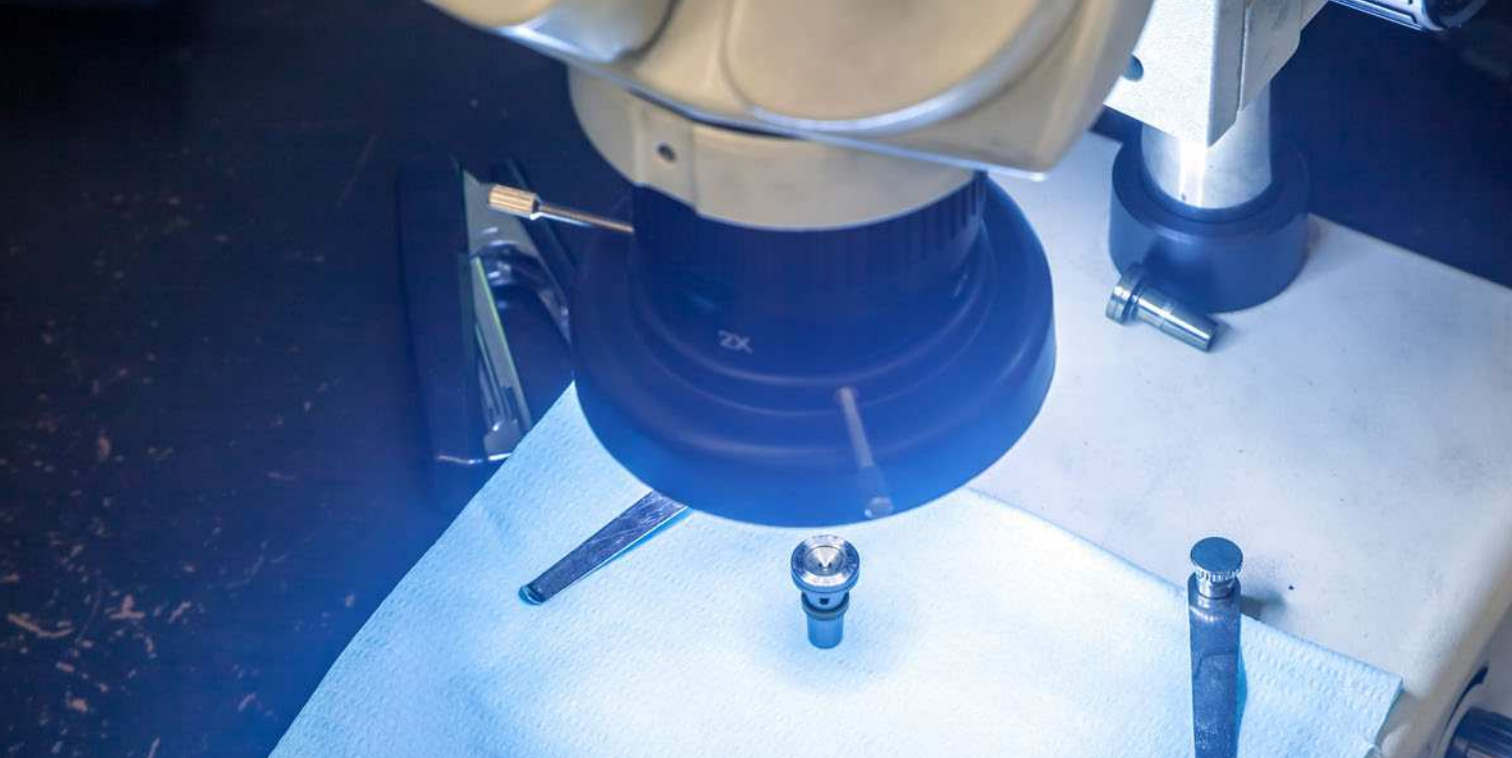
### Features

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

- 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

### Benefits

- 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
- GLP-compliant lab software
- Can be used across different branches and applications
- Also available as a cost-optimised package with 5 licenses, **you save more than 30 %!**
- Also available immediately as a download license
- Scope of supplies:
  1 CD, 1 License
  KERN SCD-4.0-PRO, **€ 290,-**
- Scope of supplies:
  1 CD, 5 Licenses
  KERN SCD-4.0-PROS05, **€ 990,-**
- Scope of supplies: Download link for
  1 License, KERN SCD-4.0-PRO-DL, **€ 290,-**

# Microscopes and Refractometers

**KERN OZL-46**
page 33
**from €**
**500,-**

# Stereomicroscope KERN OSF-4G




Stage plate black


Stage plate white

**EDUCATIONAL LINE**

## The practical and robust product for schools, training centres, the workshop and laboratory

### Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSF-4G has been specially developed for schools and workshops
- The LED reflected and transmitted illumination included as standard guarantees the very best, continuously dimmable illumination of your sample
- As well as very good optical characteristics, its ergonomic working surface means that it offers the highest level of convenience in this class
- A turnable objective with three predefined magnifications is available to make your working procedures quicker and more effective

- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- The ergonomic shape and the stable mechanism which can be adjusted extremely accurately offer a high level of functionality and enable you to work quickly and efficiently with very little effort
- A large selection of eyepieces as well as various additional external illumination units are available as accessories
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery

### Scope of application

- Training, in vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

### Applications/Samples

- Samples with focus on three-dimensional impression (depth, thickness), e.g. insects, seeds, circuit boards, components

### Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 230×180×275 mm
- Net weight approx. 2,5 kg

**!** For details on the scope of delivery and extensive accessories, see www.kern-sohn.com

STANDARD

| BINO | LED | IL | TL | BATT | 230 V | 1 DAY |

| Model | Standard configuration | | | | | | Price excl. of VAT ex works € |
|---|---|---|---|---|---|---|---|
| **KERN** | Tube | Eyepiece | Field of view mm | Objective | Stand | Illumination | |
| **OSF 438** | Binocular | WF 10×/Ø 20 mm | Ø 20 | 1×/2×/3× | Arm curved | 1 W LED (incident); 0,35 W LED (transmitted) | **325,–** |
| **OSF 439** | Binocular | WF 10×/Ø 20 mm | Ø 20 | 1×/2×/4× | Arm curved | 1 W LED (incident); 0,35 W LED (transmitted) | **325,–** |

# Stereo zoom microscope KERN OZL-46

OZL 464
With standard stand

OZL 465
With ring illumination

OZL 467
With handle

## LAB LINE

## The flexible, affordable all-rounder with zoom function for schools, training companies, inspection authorities and laboratories

**!** For details on the scope of delivery and extensive accessories, see www.kern-sohn.com

### Features

- The products in the KERN OZL-46 series are stereo zoom microscopes, which will impress you with their quality, easy handling, flexibility as well as their stability and economical price
- The LED reflected and transmitted illumination included as standard guarantees the very best illumination of your sample
- The highlight of the OZL 465/OZL 466 is the strong, continuously dimmable, integrated LED ring illumination in the objective housing, which ensures uniform, shadow-free illumination. An LED transmitted light variant is also included
- As well as excellent optical characteristics and their large working surface, these models offer the highest level of comfort in this class – ideal for training companies, workshops as well as assembly and repair workstations, e.g. in the electronics industry
- The zoom objective offers you continuous magnification from 7×–45×

- The KERN OZL-46 series is available as a binocular or trinocular version
- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- With its integrated handle as well as its stable arm curved stand, the KERN OZL 467/OZL 468 has been specially developed for schools and workshops
- A large selection of eyepieces, external illumination units as well as auxiliary objectives are available as accessories
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model outfit list

### Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

### Applications/Samples

- Samples with focus on three-dimesnional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

### Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution 50:50
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 300×240×420 mm
- Net weight approx. 4 kg

STANDARD

| 360° | BINO | TRINO | LED | IL | TL | ZOOM | 230 V | 1 DAY |

| Model | Standard configuration | | | | | | Price |
|-------|------|----------|---------------|----------------|-------|--------------|-------|
| | Tube | Eyepiece | Field of view | Objective | Stand | Illumination | excl. of VAT ex works |
| **KERN** | | | mm | Zoom | | | **€** |
| **OZL 463** | Binocular | HWF 10×/Ø 20 mm | Ø 28,6 – 4,4 | 0,7× – 4,5× | Pillar style | 3 W LED (incident); 3 W LED (transmitted) | **500,–** |
| **OZL 464** | Trinocular | HWF 10×/Ø 20 mm | Ø 28,6 – 4,4 | 0,7× – 4,5× | Pillar style | 3 W LED (incident); 3 W LED (transmitted) | **570,–** |
| **OZL 465** | Binocular | HWF 10×/Ø 20 mm | Ø 28,6 – 4,4 | 0,7× – 4,5× | Pillar style | 3 W LED (incident); 3 W LED (transmitted) | **550,–** |
| **OZL 466** | Trinocular | HWF 10×/Ø 20 mm | Ø 28,6 – 4,4 | 0,7× – 4,5× | Pillar style | 3 W LED (incident); 3 W LED (transmitted) | **620,–** |
| **OZL 467** | Binocular | HWF 10×/Ø 20 mm | Ø 28,6 – 4,4 | 0,7× – 4,5× | Arm curved | 3 W LED (incident); 3 W LED (transmitted) | **510,–** |
| **OZL 468** | Trinocular | HWF 10×/Ø 20 mm | Ø 28,6 – 4,4 | 0,7× – 4,5× | Arm curved | 3 W LED (incident); 3 W LED (transmitted) | **580,–** |

OSE 409



OZL 961/963

**NEW**



OZM 902/903



OZM 912/913

**NEW**



OZM 922/923



OZM 932/933

# Predefined stereo microscope sets with universal stand and illumination for your functional workplace

### Features

- Sets which have already been defined (except OSE 409), consisting of a stereo microscope head, a universal stand, a holder, a ring illumination and a dust cover from our range
- Simple – convenient – affordable

- This saves you spending time on configuration and being spoilt for choice in the combination of different components. In this way you get an in expensive and highly-flexible solution for your microscope workplace

| Model KERN | Microscope head | | Stand | Holder | Illumination | Price excl. of VAT ex works € |
|---|---|---|---|---|---|---|
| | Tube | Objective Zoom | | | | |
| **OSE 409** | Binocular (WF 10×/ Ø 20 mm) | 1x (WD: 230 mm) | Swivel arm with block pedestal | With coarse focusing knob Adjustable torque of the hand wheels | 3W LED goose neck (integrated) | **355,–** |
| **OZL 961** | Binocular (OZL 461) | 0,7× – 4,5× | Telescopic arm with plate | With coarse focusing knob Adjustable torque of the hand wheels | 4,5 W LED ring light (OBB-A6102) | **880,–** |
| **OZL 963** | Trinocular (OZL 462) | 0,7× – 4,5× | Telescopic arm with plate | With coarse focusing knob Adjustable torque of the hand wheels | 4,5 W LED ring light (OBB-A6102) | **950,–** |
| **OZM 902** NEW | Binocular (OZM 546) | 0,7× – 4,5× | Telescopic arm with plate (OZB-A1201) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **1290,–** |
| **OZM 903** NEW | Trinocular (OZM 547) | 0,7× – 4,5× | Telescopic arm with plate (OZB-A1201) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **1570,–** |
| **OZM 912** | Binocular (OZM 546) | 0,7× – 4,5× | Telescopic arm with plate (OZB-A5201) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **1440,–** |
| **OZM 913** | Trinocular (OZM 547) | 0,7× – 4,5× | Telescopic arm with plate (OZB-A5201) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **1740,–** |
| **OZM 922** NEW | Binocular (OZM 546) | 0,7× – 4,5× | ball-beared double telescopic arm with plate (OZB-A1203) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **1340,–** |
| **OZM 923** NEW | Trinocular (OZM 547) | 0,7× – 4,5× | ball-beared double telescopic arm with plate (OZB-A1203) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **1620,–** |
| **OZM 932** | Binocular (OZM 546) | 0,7× – 4,5× | ball-beared double telescopic arm with plate (OZB-A5203) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **1730,–** |
| **OZM 933** | Trinocular (OZM 547) | 0,7× – 4,5× | ball-beared double telescopic arm with plate (OZB-A5203) | With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301) | 4,5 W LED ring light (OBB-A6102) | **2030,–** |

NEW New model

# Professional illumination units guarantee outstanding, uniform and strong illumination

> **!** These illumination units are also available with UK mains plug. For more information on this, visit our online shop or give us a ring

## Features

- Choose your favourite external illumination here to achieve maximum flexibility and greatest possible ease of use in stereo microscopy
- These professional illumination units provide a quality of light at a high, constant intensity at all times

- Regardless of whether your choice is space-saving ring lights or cold light sources using optical fiber, our range is all you can wish for
- With the OZB-A7101 polarisation ring illumination unit, you also have an excellent component which has been specially optimised for observing shiny surfaces

- Naturally, these external illumination units also fit your standard stereo microscope
- Exception: The ring illumination units cannot be used in combination with the following ranges: OSE-1, OSF-4G, OZL-45R, OZC-5 and OZG-4


OZB-A4571


OZB-A4572


OBB-A6102


OZB-A7101

| Model  KERN | Illuminance | Inner Ø  mm | Colour temperature  K | Brightness adjustable | Illumination by segments | Polarising filter | Price excl. of VAT ex works  € |
|---|---|---|---|---|---|---|---|
| OZB-A4571 | 3W-LED | 60 | 7000 – 11000 | ✔ | | | 90,– |
| OZB-A4572 | 3W-LED | 60 | 6500 – 7000 | ✔ | ✔ | | 140,– |
| OBB-A6102 | 4,5W-LED | 63 | ca. 7600 | ✔ | | | 135,– |
| OZB-A7101 | 4,5W-LED | 62 | 6500 – 7000 | ✔ | | ✔ | 590,– |

✔ = Included with delivery          O = Option

## Fiber illumination KERN OZB-IF

### Features

- With the **OZB-A4516** 20 W-LED goose neck illumination unit with focusable light beam, you can adjust the illumination to suit your needs. Spot or scattered radiation means that you can achieve the very best illumination of your sample.


**NEW**
OZB-A4516


OZB-A4515


OZB-A4512


OZB-A4531


OZB-A4532


OZB-A4533

| Model  KERN | Description | Length  mm | Illuminance | Colour temperature  K | Brightness adjustable | Price excl. of VAT ex works  € |
|---|---|---|---|---|---|---|
| OZB-A4515 | Dual fiber unit LED | 300 | 6W | 5600 – 6300 | ✔ | 150,– 🔴 |
| OZB-A4516 | | 540 | 20W | 6400 | ✔ | 620,– |
| OZB-A4512* | Cold light source halogen | – | 24V / 150W | 3150 – 3200 | ✔ | 290,– |
| OZB-A4531* | Single fiber | 490 | | | | 175,– |
| OZB-A4532* | Dual fiber | 490 | Usable for OZB-A4512 | | | 245,– |
| OZB-A4533* | Ring fiber | 900 | | | | 350,– |

🔴 Price reduction          ✔ = Included with delivery          O = Option

# Specialists in microscopy for measurement, counting, documentation, archiving and image processing

## Features

- A large selection of microscope cameras is available for your individual applications
- The universal microscope cameras can be used anywhere and can be connected to the microscope as well as to a laptop or PC using the USB cable (USB 2.0 or USB 3.0, see table)

- The power supply is through the USB cable, which means that no additional power supply is required
- Your daily work is made significantly easier with the very best synchronisation, a high frame rate as well as stable image performance together with our camera software microscope VIS KERN OXM 901 which we deliver with the product

- For details about our software please refer to the "Camera software microscope VIS KERN OXM 901" product group in the catalogue (page 88) or see www.kern-sohn.com
- These universal cameras can also be connected to all microscopes available on the market offering the appropriate C-mount adapter for the particular microscope

## C-mount cameras – USB 2.0/3.0 KERN ODC-82 · ODC-83



### Features

- Through the proven CMOS technology, in connection with the USB 2.0 or USB 3.0 the images are shown quickly and clearly
- These cameras are also ideal for more demanding applications, such as, for example, darkfield, phase contrast and for fluorescence applications

- As well as the camera, the delivery includes our multi-lingual camera software Microscope VIS KERN OXM 901, a USB cable (Length: 2 m) various eyepiece adapters and an object micrometer to calibrate the software
- Please order the appropriate C-mount adapter to fit your KERN microscope now

STANDARD

| USB 2.0 | USB 3.0 | SOFTWARE | 1 DAY |

| Model<br><br>KERN | Resolution | Interface | FPS | Sensor | Sensor size | Colour/<br>Monochrome | Supported operating system | Price<br>excl. of VAT<br>ex works<br>€ |
|---|---|---|---|---|---|---|---|---|
| ODC 822 | 1,3 MP | USB 2.0 | 15 – 48 | CMOS | 1/3" | colour | Win XP, Vista, 7, 8, 10 | **280,–** |
| ODC 824 | 3,1 MP | USB 2.0 | 11,5 – 45 | CMOS | 1/2" | colour | Win XP, Vista, 7, 8, 10 | **370,–** |
| ODC 825 | 5,1 MP | USB 2.0 | 6,8 – 55 | CMOS | 1/2,5" | colour | Win XP, Vista, 7, 8, 10 | **385,–** |
| ODC 831 | 3,1 MP | USB 3.0 | 27,3 – 53,3 | CMOS | 1/3" | colour | Win XP, Vista, 7, 8, 10 | **500,–** |
| ODC 832 | 5,1 MP | USB 3.0 | 14,2 – 101,2 | CMOS | 1/2,5" | colour | Win XP, Vista, 7, 8, 10 | **530,–** |

## C-mount camera – HDMI KERN ODC-85



### Features

- The ODC-851 HDMI microscope camera has been specially developed for direct HDMI connection to your HDMI compatible display device. The images can also be stored directly onto the SD card delivered with the device
- As an alternative, a USB 2.0 connection is also still available to connect a laptop or PC

- Power supply is from an external 12 V power unit
- Scope of delivery: Camera, software, USB mouse, USB 2.0 cable (Length: 2 m), HDMI cable (Length: 2 m) and SD card (16 GB)
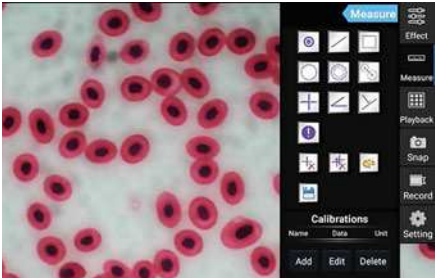- Please order the appropriate C-mount adapter to fit your KERN microscope now

STANDARD

| USB 2.0 | HDMI | SD | SOFTWARE | 230 V | 1 DAY |

| Model<br><br>KERN | Resolution | Interface | FPS | Sensor | Sensor size | Colour/<br>Monochrome | Supported operating system | Price<br>excl. of VAT<br>ex works<br>€ |
|---|---|---|---|---|---|---|---|---|
| ODC 851 | 2 MP | HDMI, USB 2.0, SD | 30 – 60 | CMOS | 1/2,8" | colour | Win XP, Vista, 7, 8, 10 | **990,–** |

# Tablet Camera KERN ODC-2



**NEW**

ODC 241



Integrated software with measuring function

## Digital microscopy brought up to date – tablet with integrated camera for optimal observation and digital documentation of the sample

### Features

- A 2-in-1 solution in digital microscopy as a universal system for trinocular microscopes with C-mount adapter. The ODC 241 microscope-tablet-camera consists of a large Android tablet in combination with a 5-MP camera
- The KERN ODC 241 tablet-camera has been specially developed for simple and direct observation of the sample on the screen. Ideally suited for school pupils and students in education or for demonstration purposes in the laboratory
- As well a live transfer of the image to the Android table, the integrated 5-MP camera also means that images and videos can be created for the documentation.
- Simple measuring functions such as, for example, functions for measuring distance, surfaces and angles as well as a manual counting function are also available

- Automatic white balance and automatic contrast adjustment can be performed quickly and easily, which enables efficient working procedures
- A range of additional functions are provided through the integrated interfaces, such as, for example
  - Data storage on a USB stick or SD card
  - Connection to a USB mouse
  - Transfer of the live image to an external screen using HDMI
  - Transfer of stored data to external receivers using WLAN
- The delivery includes the tablet camera with pre-installed software as well as the mains adapter

### Technical data

- 9.7" LCD-Touchscreen
- Screen resolution: 2048×1536 pixels
- CPU: Quad Core Cortex-A17; 1,8 GHz
- Overall dimensions W×D×H 238×51×206 mm
- Net weight approx. 0,65 kg

STANDARD

| SD | USB 2.0 | WLAN | HDMI | 230 V | 1 DAY |

| Model<br><br>**KERN** | Resolution Camera | Interface | FPS | Sensor | Sensor size | Supported operating system | **Price**<br>excl. of VAT<br>ex works<br>**€** |
|---|---|---|---|---|---|---|---|
| **ODC 241** | 5 MP | WLAN, USB 2.0, HDMI, SD | 15 – 30 | CMOS | 1/2,5" | Android 5.1 | **890,–** |

# Analogue refractometer KERN ORA





! ● Now also available with calibration certificate!

## Refractive index measurement for laboratories and the industry

### Features

- The KERN ORA refractometers are universal, maintenance free analogue handheld refractometers
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- Manually calculated conversions and errors of the user are avoided by multiple selectable scales
- These scales are especailly developed, exactly calculated and checked. They are also characterized by their thin and clear lines
- The optical system and the prism cover are made of special material which allows a low-tolerance measuring
- All ORA models are equipped with an eyepiece for easy and smooth setting for many different diopter strengths

- The models marked with "ATC" have an automatic temperature compensation which enables accurate measurement at different ambient temperatures (10 °C/30 °C)
- The follwoing accessory-parts are included:
  - Storage box
  - Calibration liquid
  - Calibration block (if required)
  - Pipette
  - Small screwdriver
  - Cleaning tissue
- Accessories are available optionally

### Technical data

- Die-cast housing of copper-aluminium alloy, chrome coated
- Measurement temperature without ATC: 20 °C
- Measurement temperature range with ATC: 10 °C/30 °C
- Dimensions of the box: 205×75×55 mm (depending on the model)
- Product length: approx. 130 – 200 mm (depending on the model)
- Net weight approx. 135 – 600 g (depending on the model)

STANDARD | OPTION
1 DAY | AUTO ATC

| Model KERN | Scales | Measuring range | Division | ATC | Scope of application | Price excl. of VAT ex works € |
|---|---|---|---|---|---|---|
| ORA 20BA | Brix | 0 – 20 % | 0,1 % | ✔ | Sugar | 85,– |
| ORA 1UA | Urea | 0 – 40 % | 0,2 % | ✔ | Industry / Automotive | 85,– |
| ORA 4RR | Refractive index | 1,440 – 1,520 nD | 0,001 nD | | Expert applications | 85,– |

# Digital refractometer KERN ORF




Transport and storage case


Rear view, screw-on battery compartment cover


IP65: Protected against dust and water splashes

## Digital refractive index measurement for laboratories and the industry for multi–application

### Features

- The KERN ORF refractometers are accurate and universal maintenance free digital handheld refractometers
- The large display is easy to read. Mistakes in reading are avoided
- The typical and practical design is suitable for a quick and convenient everyday use and is characterized by its easy-using and robustness
- The KERN ORF range is protected to international IP65 protection class, against dust and water splashes. After use, you can rinse the refractometer under running water
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement
- A large selection of models is available with single or multiple scales. This allows the use in various applications

- The instrument comes with an optimized software that can show a result in different scales
- The integrated automatic temperature compensation (ATC), avoids the manual conversion of the measurement. This allows a quick and efficient usage of the instrument
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample.
- The follwoing accessory-parts are included:
  - Calibration liquid
  - Pipette
  - Storage box
  - 2 × AAA batteries
  - Leather bag
  - Small screwdriver
  - Cleaning tissue

### Technical data

- Measurement temperature: 5 °C – 40 °C
- Overall dimensions W×D×H 133×65×38 mm
- Net weight approx. 200 g
- Power supply: 2 × AAA (1,5 V)
- Lifetime of the battery: approx. 3.750 measurements
- ATC (Automatic Temperature Compensation)
- Minimum sample volume: 2–3 drops
- Automatic energy management (AUTO-OFF after 90 seconds)

**!** Now also available with calibration certificate!

STANDARD

IP 65 | BATT | 1 DAY

| Model<br><br>KERN | Scales | Measuring range | Division | ATC | Scope of application | Price<br>excl. of VAT<br>ex works<br>€ |
|---|---|---|---|---|---|---|
| ORF 45BM | Brix<br>Refractive index | 0 – 45 %<br>1,3330 – 1,4098 nD | ± 0,2 %<br>± 0,0003 nD | 0,1 %<br>0,0001 nD | Sugar | **340,–** |
| ORF 5UM | EG<br>PG<br>Urea<br>CW | -50 – 0 °C<br>-50 – 0 °C<br>0 – 40 %<br>-40 – 0 °C | ± 0,5 °C<br>± 0,5 °C<br>± 0,2 %<br>± 0,5 °C | 0,1 °C<br>0,1 °C<br>0,1 %<br>0,1 °C | Industry/Automotive | **340,–** |
| ORF 1RS | Refractive index | 1,3330 – 1,5400 nD | ± 0,0005 nD | 0,0001 nD | Expert applications | **430,–** |

AUTHORISATION
FOR **INITIAL**
**VERIFICATION**
**BY THE**
**MANUFACTURER**
2014/31/EU

**German Excellence Group**
Member

**1769**
Ancestor Johann Jakob Sauter built the Hahn inclination scale out of iron, a foundation stone for weighing for the balance industry in Southern Germany

**1844**
KERN is founded – precision balances are produced

**1863**
A proud Gottlieb Kern with his staff

**1880**
Pharmaceutical balance with Aesculap

**1923**
Inflation – KERN wages are paid with self printed currency

**1980**
The electronic balance ousts mechanical devices

**1994**
Accredited DKD laboratory (ISO 17025)

**2000**
New premises in Balingen

**2002**
Existing QM system certification in accordance with DIN EN ISO 9001:2000 standards

**2007**
Approval for the manufacture of medical products (DIN EN 13485 and 93/42/EEC)

**2008**
Authorisation for initial verification by the manufacturer (2009/23/EC)

**2009**
Approval for the manufacture and sale of height rods (DIN EN 13485 and 93/42/EEC)

**2012**
Verification point for non-automatic balances and test weights.

New customer portal www.kern-sohn.com goes live

**2014**
Expansion of the product range to include optical instruments (microscopes and refractometers)

**2015**
Inauguration of Ziegelei 2.0 with computer-controlled high-bay warehouse

**2017**
Come with KERN into the digital future: Expansion of the model ranges compatible with Industry 4.0, as well as the related services

**2019**
Significant anniversary year for KERN
25 years of accredited DKD laboratory
175 years of KERN & SOHN
250 years of balance manufacture in the Sauter family-owned company