

**SPECIAL EQUIPMENT:
SCALES TO MEET PRE-PACKAGING LEGISLATION/
ATEX SCALES/BOTTLE STOCKTAKING SCALES**



PROFESSIONAL MEASURING

2016

KERN Pictograms

| | | |
|--|--|--|
|  <p>Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven).</p> |  <p>Piece counting: Reference quantities selectable. Display can be switched from piece to weight.</p> |  <p>Suspended weighing: Load support with hook on the underside of the balance.</p> |
|  <p>Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required.</p> |  <p>Recipe level A: Separate memory for the weight of the tare container and the recipe ingredients (net total).</p> |  <p>Battery operation: Ready for battery operation. The battery type is specified for each device.</p> |
|  <p>Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.</p> |  <p>Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.</p> |  <p>Rechargeable battery pack: Rechargeable set.</p> |
|  <p>Alibi memory: Electronic archiving of weighing results, complying with the 2009/23/EC standard. For details see page 214</p> |  <p>Recipe level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, barcode.</p> |  <p>Universal mains adapter: with universal input and optional input socket adapters for A) EU, GB B) EU, GB, CH, USA C) EU, GB, CH, USA, AUS</p> |
|  <p>Data interface RS-232: To connect the balance to a printer, PC or network.</p> | |  <p>Mains adapter: 230V/50Hz in standard version for EU. On request GB, USA or AUS version available.</p> |
|  <p>RS-485 data interface: To connect the balance to a printer, PC or other peripherals. High tolerance against electromagnetic disturbance.</p> |  <p>Totalising level A: The weights of similar items can be added together and the total can be printed out.</p> |  <p>Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request.</p> |
|  <p>USB data interface: To connect the balance to a printer, PC or other peripherals.</p> |  <p>Totalising level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, barcode recognition.</p> |  <p>Weighing principle: Strain gauges Electrical resistor on an elastic deforming body.</p> |
|  <p>Bluetooth* data interface: To transfer data from the balance to a printer, PC or other peripherals.</p> | |  <p>Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate.</p> |
|  <p>WLAN data interface: To transfer data from the balance to a printer, PC or other peripherals.</p> |  <p>Percentage determination: Determining the deviation in % from the target value (100 %).</p> |  <p>Weighing principle: Electromagnetic force compensation Coil inside a permanent magnet. For the most accurate weighings.</p> |
|  <p>Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.</p> |  <p>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.</p> |  <p>Weighing principle: Single cell technology Advanced version of the force compensation principle with the highest level of precision.</p> |
|  <p>Interface for second balance: For direct connection of a second balance.</p> |  <p>Weighing with tolerance range: Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning</p> |  <p>Verification possible: The time required for verification is specified in the pictogram.</p> |
|  <p>Network interface: For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter. See page 180</p> |  <p>Hold function: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.</p> |  <p>DAKkS calibration possible (DKD): The time required for DAKkS calibration is shown in days in the pictogram.</p> |
|  <p>Wireless data transfer: between the weighing unit and the evaluation unit using an integrated radio module.</p> |  <p>Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram. For details see the glossary. See page 72.</p> |  <p>Package shipment: The time required for internal shipping preparations is shown in days in the pictogram.</p> |
|  <p>GLP/ISO log: The balance displays the weight, date and time, regardless of a printer connection.</p> |  <p>ATEX explosion protection: Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.</p> |  <p>Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram.</p> |
|  <p>GLP/ISO log: With weight, date and time. Only with KERN printers, see "Accessories", see page 177.</p> |  <p>Stainless steel: The balance is protected against corrosion.</p> |  <p>Warranty: The warranty period is shown in the pictogram.</p> |

KERN – measuring technology and testing services from a single source



Balances & Test service catalogue

Provides a complete overview of the KERN line of balances, test weights, and services, services such as verification, calibration, etc.



Medical scales catalogue

Complete line of medical scales, from infant scales to patient scales, chair scales and adiposity scales, as well as hand grip dynamometers, chemist's balances, and veterinary scales.



Microscopes & refractometers catalogue

Extensive range in the area of optical instruments, such as, for example, biological microscopes, stereo microscopes, metallurgical microscopes, polarisation microscopes as well as analogue and digital refractometers.



SAUTER measuring equipment catalogue

Test instruments for industry and commerce, such as force, coating thickness, material thickness and calibration service.



KERN DAKkS calibration service brochure

Detailed information on topics pertaining to the calibration and verification of balances, test weights, and force measuring devices.



KERN flyer Special offers

Compact overview of our bestselling products – just the balances/measuring instruments/microscopes your customers need! Can be customised to suit your requirements.



The gnome guide

Travel report from KERN, the famous scientific gnome, who travelled all over the world, in order to illustrate the physical law of gravitational force. Ideal for use in school education – please request, it's free of charge.



170 years of KERN

Interesting and readable overview of the history of the origins of Southern German balance manufacturing, as well as the company history, which stretches right back to 1770 – please request, it's free of charge.

Your advantages

1 Quick Delivery
Items in stock are sent the same day if orders are placed before 1:00 pm (valid for parcel service delivery within the EC).

2 Price performance ratio
KERN scales are always an inexpensive alternative. They are durable, uncomplicated and easy to place into operation.

3 Direct dispatch
of ordered goods to your customer is available, with personalised delivery note if desired (please ask), invoice will be issued to you (third party business).

4 3 years warranty
Items under € 400,- : 2 years

5 No stock-keeping necessary.
KERN does the warehousing for you.

6 Sale or return
within 14 days of purchase.

Special equipment: Scales to meet Pre-packaging legislation

Pre-packaging legislation (FPVO)

This is anchored in the EC pre-packaging directive 76/211/EEC and serves as consumer protection within the framework of weights and measures laws when selling pre-packaged products commercially. It governs in detail the permitted tolerances (deviations) from the filling quantity stated on the sales label, as well as the quality of the verified balances being used for checking samples.

Pre-packaged products, which are produced and tested in accordance with pre-packaging legislation, carry the ϵ symbol on their label.

Choosing the right verified checkweigher depends, on one hand, on the weighing range required and the largest permitted verification value in relation to the nominal quantity of the pre-packaged goods.

| Nominal contents Q_N of the pre-packed goods | largest permitted Verification Value [e] |
|--|--|
| ≤ 10 g (ml) | 0,1 g |
| from 10 g (ml) to ≤ 50 g (ml) | 0,2 g |
| from 50 g (ml) to ≤ 150 g (ml) | 0,5 g |
| from 150 g (ml) to ≤ 500 g (ml) | 1,0 g |
| from 500 g (ml) to $\leq 2,5$ kg (l) | 2,0 g |
| from 2,5 kg (l) and more | 5,0 g |
| from 10 kg (l) to ≤ 15 kg (l) | 10 g |
| from 15 kg (l) to ≤ 25 kg (l) | 20 g |
| from 25 kg (l) to ≤ 100 kg (l) | 50 g |

Volume values in ml or l are calculated using the weight and density of the liquid.

Order example:

The item to be checked is a pre-packaged product with a filling quantity of 250 g and an average tare value of 100 g. In accordance with the table above, a filling quantity of 250 g requires a checkweigher with a verification value [e] of maximum 1 g.

The right KERN product is either the **KERN FKTF 3K0.5LM** or the **FKTF 6K1LM**

Calibration periods for checkweighers: These are usually 1 year and are therefore shorter than the general re-verification periods in many European countries.



Sample testing of a pre-packaged item with an average tare value, e.g. the relative constant packaging weight is entered as a fixed value



Sample testing of a pre-packaged item with fluctuating packaging weight, such as glass containers, e.g. the tare weight is entered individually for each sample.



Sample testing of a pre-packaged item which is empty (destructive analysis)



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Quick-Finder Scales to meet Pre-packaging legislation

| Read-out [d] | Weighing range [Max] | Model KERN | Price excl. of VAT ex works € | Page | DAYS ready for shipping | M | CAL EXT | MEMORY | RS 232 | BATT |
|--------------|----------------------|---------------------|-------------------------------|------|-------------------------|---|---------|--------|--------|------|
| 0,5 g | 3 kg | FKTF 3K0.5LM | 1050,- | 170 | 1 | ○ | ● | ● | ● | ● |
| 1 g | 6 kg | FKTF 6K1LM | 1050,- | 170 | 1 | ○ | ● | ● | ● | ● |
| 2 g | 12 kg | FKTF 12K2LM | 1050,- | 170 | 1 | ○ | ● | ● | ● | ● |
| 5 g | 30 kg | FKTF 30K5LM | 1050,- | 170 | 1 | ○ | ● | ● | ● | ● |
| 10 g | 60 kg | FKTF 60K10LM | 1050,- | 170 | 1 | ○ | ● | ● | ● | ● |

● = Standard

○ = Option

Pre-packaged Products Control Scale KERN FKTF



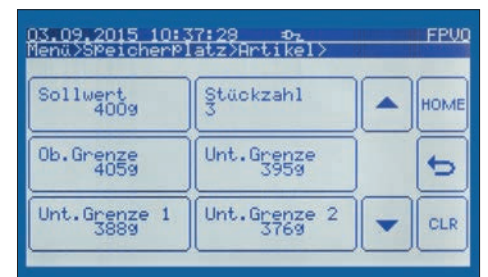
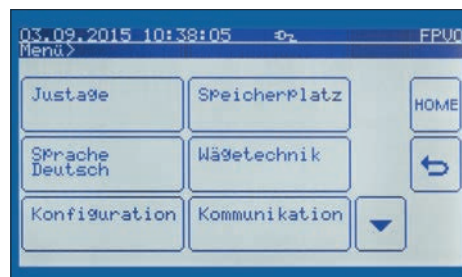
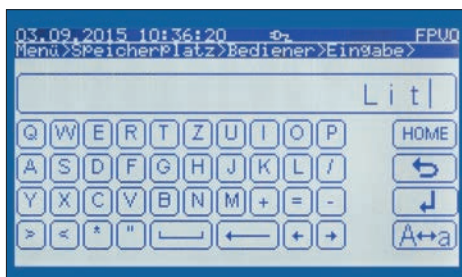
Modes

- ① Weighing
- ② Checkweighing function in accordance with pre-packaging legislation
- ③ Controlling fill quantities

Functions

- Capacity display ①
- Date and time ①, ②, ③
- Tare deduction ②
- 400 item memories for master data, such as limit values, tare weights, items, machine, user as well as UL, LL, LL 1 and LL 2 ②, ③
- Sample testing in accordance with pre-packaging legislation with average tare value ③
- Sample testing in accordance with pre-packaging legislation with fluctuating tare ③
- Testing in accordance with pre-packaging legislation with an empty item (destructive analysis) ②, ③
- Daily statistics from 10 sets of measurements ③
- Weekly statistics from 49 sets of measurements ③

Checkweigher with touch screen operation for sampling tests in accordance with certified pre-packaging legislation and controlling fill quantities in the production process



Easy input of text and values

Using large keypad, e.g. packaging weights, item descriptions, user name, etc.

Clear user guidance with buttons labelled with plain text, which saves time and means that operating errors are avoided

400 item memories for master data such as PRE-TARE (packaging weight), free limit values, user name, machine number, batch description etc.

Pre-packaged Products Control Scale KERN FKTF

Features

- **Touchscreen bench scale** with special software for testing, in accordance with weights and measures regulations, that the permitted error limits (minus deviations) have been observed, in accordance with pre-packaging legislation, and for production control and monitoring when filling pre-packaged items to a target weight.
- **The verifiable KERN FKTF** fulfills all the regulations of pre-packaging legislation. It has EC type approval which fulfils verification requirements, and which covers the special software for pre-packing legislation.
- **The special software for pre-packaging legislation in the KERN FKTF has two functions:**
 - a) When selling pre-packaged products, filling tolerances are regulated in verification terms, in the interests of consumer protection. Here the software supports compliance with the verification regulations of the pre-packaging legislation during certified sampling tests using the automatically generated largest permitted negative deviation compared with a given target weight (LL 2).
 - b) In the area of food stuff production, when setting and adjusting the production facility for filling pre-packaged goods to a target weight, the software will automatically display the lower limit value (LL 1) below which the item is not permitted.
- **Statistical function** in the form of daily and weekly records, also with date/time, machine number and user statement. Graphic display is also possible.
- **Password protection** for secure manipulation of data which has been stored and collected

Technical data

- Backlit LCD graphic display with digit height 18 mm, screen diagonal 5.8" (approx. 147 mm)
- Weighing plate dimensions, stainless steel, WxD 340x240 mm
- Dimensions housing WxDxH 350x390x120 mm
- Optional battery operation, 6 x 1.5 V Size C not included, operating time up to 15 h
- Net weight approx. 6,5 kg
- Permissible ambient temperature 10 °C / 40 °C

Accessories

- **Protective working cover** over keyboard and housing, standard. Can be re-ordered, scope of delivery: 5 items, KERN FKB-A02S05, **€ 25,-**
- **Matrix needle printer**, to print the weights on normal paper, ideal for long-term archiving, KERN 911-013, **€ 330,-**
- **Suitable printers** see page 177

| | |
|-----------|------------|
| Datum | 17.03.2015 |
| Start | 10:55:44 |
| Bediener | Muelier |
| Art. Code | 234345456 |
| Art. Name | Essiggurke |
| Maschine | 1 |
| 5x Netto | |
| Messung 1 | 250,0g |
| Messung 2 | 252,0g |
| Messung 3 | 257,0g + |
| Messung 4 | 247,0g |
| Messung 5 | 242,0g - |
| Total | 1248,0g |
| Mittel | 249,6g |
| Std. Abw. | 5,0g |
| Max. | 257,0g |
| Min. | 242,0g |
| Sollwert | 250,0g |
| Tara | 100,0g |
| UG | 1 > 254,5g |
| UG | 1 < 245,5g |
| UG1 | 0 < 241,0g |
| UG2 | 0 < 232,0g |
| Ende | 10:56:32 |

- **1** Operator, Item code, Item name, Machine, Filling quantity target value 250g, Average tare value 100g are entered using the touchscreen keypad
- **2** The measurements taken are captured and stored automatically
- **3** Average value, Standard deviation, Max. value, Min. value are calculated automatically
- **4** The upper/lower limit values (UL/LL) for setting and adjusting the production facility are stored by the machine operator in the pre-packaging legislation software of the checkweigher. In the course of checking pre-packaged items in accordance with pre-packaging legislation, please note that the value must not fall below the lower limit value LL 1 during production
- **5** The LL 2 value is the permitted lower limit in accordance with pre-packaging legislation for on-site sampling tests in accordance with weights and measures regulations.

STANDARD



OPTION



FACTORY



| Model | Weighing range [Max] kg | Readout [d] g | Verification value [e] g | Minimum load [Min] g | Nominal quantity g | Price excl. of VAT ex works € | Option | | | |
|-------------------|-------------------------|---------------|--------------------------|----------------------|--------------------|-------------------------------|--------------|------|---------------------------|-------|
| | | | | | | | Verification | | DAkkS Calibr. Certificate | |
| | | | | | | | M | € | DKD | € |
| KERN FKTF 3K0.5LM | 3 | 0,5 | 0,5 | 10 | 50 | 1050,- | 950-127 | 55,- | 963-127 | 72,- |
| KERN FKTF 6K1LM | 6 | 1 | 1 | 20 | 150 | 1050,- | 950-128 | 55,- | 963-128 | 88,- |
| KERN FKTF 12K2LM | 12 | 2 | 2 | 40 | 500 | 1050,- | 950-128 | 55,- | 963-128 | 88,- |
| KERN FKTF 30K5LM | 30 | 5 | 5 | 100 | 2500 | 1050,- | 950-128 | 55,- | 963-128 | 88,- |
| KERN FKTF 60K10LM | 60 | 10 | 10 | 200 | 10000 | 1050,- | 950-129 | 93,- | 963-129 | 105,- |

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.

ATEX – Safe weighing in potentially explosive atmospheres!

ATEX is derived from the French words for explosive atmosphere (**AT**mosphère **EX**plosible) and is a synonym for EU guidelines, for the quality and the use of equipment in hazardous industrial environments

ATEX balances were developed specifically for those areas where there is explosion danger, e.g. through handling of flammable substances, which are present in high concentrations in the form of gas, mist, vapour or dust.

Typical fields of application are to be found, for example, in the crude oil processing industry, e.g. in all kinds of refineries. But also in the pharmaceutical or chemical industries, where you are processing oils, alcohols or Benzenes, in the manufacture of paints and lacquers, as well as in the cosmetics industry in the manufacture of alcohol-based cosmetics.

Note: Power supply to the ATEX scales is from a power source outside the explosion-proof area.



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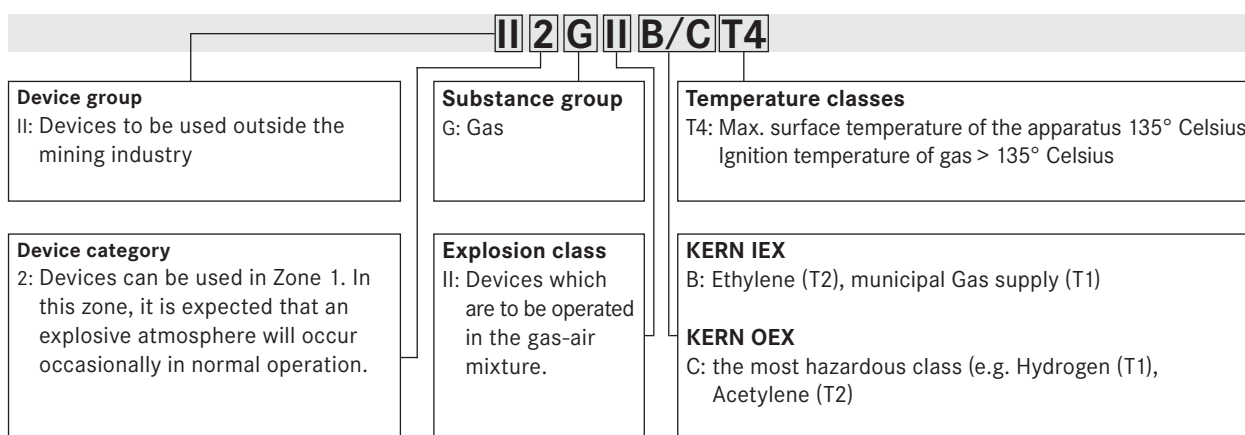
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ATEX balances are divided into different protection classes, depending on the level of danger.

The KERN ATEX balances are permitted for the following protection classes:

Model KERN IEX: **II 2 G II B T4**

Model KERN OEX: **II 2 G II C T4**



Quick-Finder ATEX scales

| Read-out | Weighing range | Model | Price excl. of VAT ex works € | Page | DAYS ready for shipping | | | | | | | |
|----------|----------------|--------------|-------------------------------|------|-------------------------|--|---|---|---|---|---|---|
| [d] | [Max] | KERN | | | | For an explanation on the pictos, see the front flap | | | | | | |
| 2 g | 6 kg | IEX 6K-3M | 1950,- | 173 | 20 | ● IIB | ○ | ● | ● | ● | ● | ● |
| 2 g | 6 kg | OEX 6K-3M | 4330,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 2 g | 6 kg | OEX 6K-3HM | 4330,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 5 g | 15 kg | IEX 10K-3M | 1950,- | 173 | 20 | ● IIB | ○ | ● | ● | ● | ● | ● |
| 5 g | 15 kg | OEX 10K-3M | 4330,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 5 g | 15 kg | OEX 10K-3HM | 4330,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 10 g | 30 kg | IEX 30K-2M | 2150,- | 173 | 20 | ● IIB | ○ | ● | ● | ● | ● | ● |
| 10 g | 30 kg | OEX 30K-2M | 4730,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 10 g | 30 kg | OEX 30K-2HM | 4730,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 20 g | 60 kg | IEX 60K-2M | 2150,- | 173 | 20 | ● IIB | ○ | ● | ● | ● | ● | ● |
| 20 g | 60 kg | OEX 60K-2M | 5690,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 20 g | 60 kg | OEX 60K-2HM | 5690,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 50 g | 150 kg | IEX 100K-1M | 2850,- | 173 | 20 | ● IIB | ○ | ● | ● | ● | ● | ● |
| 50 g | 150 kg | OEX 100K-1M | 5690,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |
| 50 g | 150 kg | OEX 100K-1HM | 5690,- | 174 | 20 | ● IIC | ○ | ● | ● | ● | ● | ● |

● = Standard

○ = Option



Platform scale with ATEX approval in explosion class II B, with EC type approval [M]

Features

- **Class of protection II 2 G II B T4**, see page 172
- **Stainless steel weighing plate**, painted steel base **1**
- **2 Weighing platform** with dust and spray protection IP65
- **Load cell** aluminium, **silicone-coated**
- **3 Stainless steel display device**, protection against dust and water splashes IP67

Technical data

- Backlit LCD display, digit height 18 mm
- Weighing plate dimensions, stainless steel, WxDxH
A 300x300x70 mm
B 500x400x105 mm
- Dimensions of display device WxDxH 170x172x76 mm (incl. benchtop stand: WxDxH 226x250x120 mm)
- Cable length of display device, shielded and fail safe, 6-core, length approx. 2,5 m
- Permissible ambient temperature -10 °C / 40 °C

3 Power supply using power supply outside the explosion-proof area using a 20 m long cable with **5** screw coupling to fix the display device. Power supply included with delivery. Please indicate the type required at purchase, e.g.:
 European power supply: IEX 6K-3MEU
 UK power supply: IEX 6K-3MUK

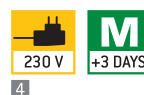
STANDARD



OPTION



FACTORY



| Model | Weighing range [Max] kg | Readout [d] g | Verification value [e] g | Minimum load [Min] g | Net weight approx. kg | Weighing plate | Price excl. of VAT ex works € | Options | | | |
|-------------|-------------------------|---------------|--------------------------|----------------------|-----------------------|----------------|-------------------------------|--------------|------|---------------------------|-------|
| | | | | | | | | Verification | | DAkkS Calibr. Certificate | |
| | | | | | | | | M III KERN | € | DKD KERN | € |
| IEX 6K-3M | 6 | 2 | 2 | 40 | 9,5 | A | 1950,- | 965-228 | 55,- | 963-128 | 88,- |
| IEX 10K-3M | 15 | 5 | 5 | 100 | 9,5 | A | 1950,- | 965-228 | 55,- | 963-128 | 88,- |
| IEX 30K-2M | 30 | 10 | 10 | 200 | 18,5 | B | 2150,- | 965-228 | 55,- | 963-128 | 88,- |
| IEX 60K-2M | 60 | 20 | 20 | 400 | 18,5 | B | 2150,- | 965-229 | 93,- | 963-129 | 105,- |
| IEX 100K-1M | 150 | 50 | 50 | 1000 | 18,5 | B | 2850,- | 965-229 | 93,- | 963-129 | 105,- |

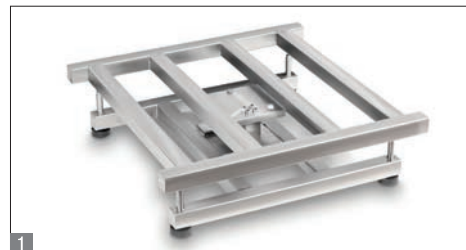
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.



KERN OEX-HM



KERN OEX-M



2 Power supply using power supply outside the explosion-proof area using a 20 m long cable with screw coupling to fix the display device. Power supply included with delivery. Please indicate the type required at purchase, e.g.:
European power supply: OEX 6K-3MEU
UK power supply: OEX 6K-3MUK

Platform scale with ATEX approval in explosion class II C, with EC type approval [M]

Features

- **Class of protection II 2 G II C T4**, see page 172
- **Stainless steel weighing plate**, stainless steel substructure **1**
- **Weighing platform** with dust and spray protection IP67
- **Load cell** aluminium, **silicone-coated**
- Stainless steel **display device**, protection against dust and water splashes IP67
- Column to screw on to the platform, standard for models OEX-HM

Technical data

- Backlit LCD display, digit height 18 mm
- Weighing plate dimensions, stainless steel, WxDxH
 - A** 250x300x155 mm
 - B** 410x410x115 mm, see enlarged picture
 - C** 500x500x155 mm
- Dimensions of display device WxDxH 170x172x76 mm (only OEX-M: incl. benchtop stand: WxDxH 226x250x120 mm)

- only OEX-HM: Height incl. fitted column, approx. 790 mm
- Cable length of display device, shielded and fail safe, 6-core, length approx. 2,5 m
- Permissible ambient temperature -10 °C / 40 °C

STANDARD



OPTION



FACTORY



| Model | Weighing range [Max] kg | Readout [d] g | Verification value [e] g | Minimum load [Min] g | Net weight approx. kg | Weighing plate | Price excl. of VAT ex works € | Options | | | |
|-----------------------|-------------------------|---------------|--------------------------|----------------------|-----------------------|----------------|-------------------------------|--------------|------|---------------------------|-------|
| | | | | | | | | Verification | | DAkkS Calibr. Certificate | |
| | | | | | | | | M III KERN | € | DKD KERN | € |
| OEX 6K-3M | 6 | 2 | 2 | 40 | 9 | A | 4330,- | 965-228 | 55,- | 963-128 | 88,- |
| OEX 10K-3M | 15 | 5 | 5 | 100 | 9 | A | 4330,- | 965-228 | 55,- | 963-128 | 88,- |
| OEX 30K-2M | 30 | 10 | 10 | 200 | 11 | B | 4730,- | 965-228 | 55,- | 963-128 | 88,- |
| OEX 60K-2M | 60 | 20 | 20 | 400 | 17 | C | 5690,- | 965-229 | 93,- | 963-129 | 105,- |
| OEX 100K-1M | 150 | 50 | 50 | 1000 | 17 | C | 5690,- | 965-229 | 93,- | 963-129 | 105,- |
| with elevated display | | | | | | | | | | | |
| OEX 6K-3HM | 6 | 2 | 2 | 40 | 9,5 | A | 4330,- | 965-228 | 55,- | 963-128 | 88,- |
| OEX 10K-3HM | 15 | 5 | 5 | 100 | 9,5 | A | 4330,- | 965-228 | 55,- | 963-128 | 88,- |
| OEX 30K-2HM | 30 | 10 | 10 | 200 | 11,5 | B | 4730,- | 965-228 | 55,- | 963-128 | 88,- |
| OEX 60K-2HM | 60 | 20 | 20 | 400 | 18 | C | 5690,- | 965-229 | 93,- | 963-129 | 105,- |
| OEX 100K-1HM | 150 | 50 | 50 | 1000 | 18 | C | 5690,- | 965-229 | 93,- | 963-129 | 105,- |

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.



| Number | Name | Date | Time | Person | Bar | Volume in g | Volume in g (Factor) | # of B |
|--------|------------------------|------------|----------|--------|-------------|-------------|----------------------|--------|
| 200 | ABSOLUT VANILLA | 20.08.2012 | 17:07:00 | MAIER | BAR TORGAST | 70.0 | 1.000 | 0.000 |
| 201 | BUSHMILLS IRISH WHISKY | 20.08.2012 | 17:08:00 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 202 | CAMPONES VEGE | 20.08.2012 | 17:07:10 | MAIER | BAR TORGAST | 67.0 | 0.800 | 0.000 |
| 203 | JONAS LIQUOR CLASSICO | 20.08.2012 | 17:07:20 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 204 | THE MARULA | 20.08.2012 | 17:10:00 | MAIER | BAR TORGAST | 40 | 0.400 | 0.000 |
| 205 | WOODFORD RESERVE | 20.08.2012 | 17:12:30 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 206 | ABSOLUT VANILLA | 20.08.2012 | 17:07:00 | MAIER | BAR TORGAST | 70.0 | 1.000 | 0.000 |
| 207 | BUSHMILLS IRISH WHISKY | 20.08.2012 | 17:08:00 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 208 | CAMPONES VEGE | 20.08.2012 | 17:07:10 | MAIER | BAR TORGAST | 67.0 | 0.800 | 0.000 |
| 209 | JONAS LIQUOR CLASSICO | 20.08.2012 | 17:07:20 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 210 | THE MARULA | 20.08.2012 | 17:10:00 | MAIER | BAR TORGAST | 40 | 0.400 | 0.000 |
| 211 | WOODFORD RESERVE | 20.08.2012 | 17:12:30 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 212 | ABSOLUT VANILLA | 20.08.2012 | 17:07:00 | MAIER | BAR TORGAST | 70.0 | 1.000 | 0.000 |
| 213 | BUSHMILLS IRISH WHISKY | 20.08.2012 | 17:08:00 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 214 | CAMPONES VEGE | 20.08.2012 | 17:07:10 | MAIER | BAR TORGAST | 67.0 | 0.800 | 0.000 |
| 215 | JONAS LIQUOR CLASSICO | 20.08.2012 | 17:07:20 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 216 | THE MARULA | 20.08.2012 | 17:10:00 | MAIER | BAR TORGAST | 40 | 0.400 | 0.000 |
| 217 | WOODFORD RESERVE | 20.08.2012 | 17:12:30 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 218 | CAMPONES | 20.08.2012 | 17:07:10 | MAIER | BAR TORGAST | 67.0 | 0.800 | 0.000 |
| 219 | THE MARULA | 20.08.2012 | 17:10:00 | MAIER | BAR TORGAST | 40 | 0.400 | 0.000 |
| 220 | ABSOLUT VANILLA | 20.08.2012 | 17:07:00 | MAIER | BAR TORGAST | 70.0 | 1.000 | 0.000 |
| 221 | BUSHMILLS IRISH WHISKY | 20.08.2012 | 17:08:00 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 222 | CAMPONES VEGE | 20.08.2012 | 17:07:10 | MAIER | BAR TORGAST | 67.0 | 0.800 | 0.000 |
| 223 | JONAS LIQUOR CLASSICO | 20.08.2012 | 17:07:20 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |
| 224 | THE MARULA | 20.08.2012 | 17:10:00 | MAIER | BAR TORGAST | 40 | 0.400 | 0.000 |
| 225 | WOODFORD RESERVE | 20.08.2012 | 17:12:30 | MAIER | BAR TORGAST | 60.0 | 0.800 | 0.000 |



Stocktaking scale with touchscreen for efficiently measuring beverage residuals in bottles and for transferring information to the PC

Features

- **Your advantage:** Less time consuming, compared with the measuring method used before
 - Up to now: Generally, the content of a bottle is established by a visual check, e.g. estimated, documented manually and then manually entered into the PC.
 - New with KERN SMT: Now you can easily select drinks and spirits by item name, item number, autolist or using a barcode scanner, then you can weigh the bottle, transfer the results to the PC - and stocktaking is done!
- **400 item memories** for master data such as item name, item description, PRE-TARE, e.g. weight of the empty bottle, max. bottle content in g, specific weight of liquid etc. The associated stock list can easily be generated at the PC
- **Easy entering of items at the PC:** An excel list with spirit bottles produced at a PC can be transferred to the balance using the software included as standard. Whether in the bar or in the warehouse, the spirits can be weighed in their bottles. In doing so, the stored bottle weight will be subtracted automatically.

After the stocktaking, the results will be transferred back to the PC where they can then be processed further as an Excel table

- Determination of beverage inventory according to an internal stock list
- **Selecting the spirit:** During stocktaking, the beverage to be registered can be selected using item name, item number, autolist or using a barcode scanner

Technical data

- Backlit LCD graphic display with digit height 13 mm, screen diagonal 4,3" (approx. 109 mm)
- Weighing plate dimensions, stainless steel, WxD 160x200 mm
- Overall dimensions WxDxH 180x310x85 mm
- **Rechargeable battery pack internal**, standard, operating time up to 12 h without backlight, charging time approx. 10 h
- Net weight approx. 2,7 kg
- Permissible ambient temperature 10 °C / 40 °C

Modes

- ① Weighing
- ② Determination stock level

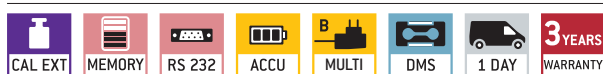
Functions

- Capacity display with ①, ②
- PRE-TARE from the memory unit with ①, ②
- Date/time with ①, ②
- GLP printout with ①, ②
- Data transfer of stock items from PC → Stocktaking scale from Excel list with ②
- Transfer of the stocktake information from stocktaking scale → PC as an Excel list with ②
- Selection of stock location and user with ②

Accessories

- **Protective working cover** over keyboard and housing, standard. Can be re-ordered, scope of delivery: 5 items, KERN 572-A02S05, **€ 35,-**
- **Volume kit** for determining the specific weight of beverages, scope of delivery: precision balance KERN EMB 600-2, beaker, pipette, KERN SMT-A05, **€ 850,-**
- **Barcode scanner**, table-top version, dimensions WxDxH 230x150x135 mm, KERN SMT-A02, **€ 685,-**
- **Barcode scanner**, hand-held version, dimensions WxDxH 235x210x115 mm, KERN SMT-A03, **€ 445,-**
- **Radio barcode scanner**, hand-held version, dimensions WxDxH 225x220x110 mm, KERN SMT-A04, **€ 495,-**

STANDARD



OPTION



| Model | Weighing range | Readout | Reproducibility | Linearity | Price excl. of VAT ex works | Option | |
|-----------|----------------|----------|-----------------|-----------|-----------------------------|---------------------------|------|
| | | | | | | DAkKS Calibr. Certificate | |
| KERN | [Max] kg | [d] g | g | g | € | DKD KERN | € |
| SMT 10K-3 | 10 | 1 | 0,5 | ± 0,5 | 950,- | 963-128 | 88,- |

! Laptop and decorative items not within the scope of delivery

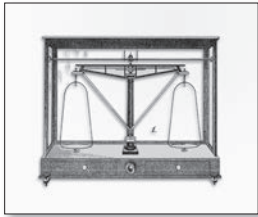
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► 1844

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

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► 2000

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► 2002

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► 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

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► 2014

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► 2015

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



Our Tip

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