KERN Pictograms

**Internal adjusting:**
Quick setting up of the balance’s accuracy with internal adjusting weight (motor-driven).

**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.

**Alibi memory:**
Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard. For details see page 223.

**Data interface RS-232:**
To connect the balance to a printer, PC or network.

**RS-485 data interface:**
To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible.

**USB data interface:**
To connect the balance to a printer, PC or other peripherals.

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

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

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

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

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

**Network interface:**
For connecting the scale to an Ethernet network.

**Wireless data transfer:**
Between the weighing unit and the evaluation unit using an integrated radio module.

**KERN Communication Protocol (KCP):**
It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems.

**Protection against dust and water splashes IPxx:**
The type of protection is shown in the pictogram. For details see page 62.

**Stainless steel:**
The balance is protected against corrosion.

**Suspended weighing:**
Load support with hook on the underside of the balance.

**Battery operation:**
Ready for battery operation. The battery type is specified for each device.

**Rechargeable battery pack:**
Rechargeable set.

**Recipe level A:**
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out.

**Recipe level B:**
Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.

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

**Totalising level A:**
The weights of similar items can be added together and the total can be printed out.

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

**Weighing units:**
Can be switched to e.g. nonmetric units at the touch of a key. See balance model. Please refer to KERN’s website for more details.

**Weighing with tolerance range:**
(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.

**Weighing principle:**
- **Single cell technology:**
  Advanced version of the force compensation principle with the highest level of precision.

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

**DAkkS calibration possible (DKD):**
The time required for DAkkS calibration is shown in days in the pictogram.

**Package shipment:**
The time required for internal shipping preparations is shown in days in the pictogram.

**Pallet shipment:**
The time required for internal shipping preparations is shown in days in the pictogram.

- **The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Other trademarks and trade names are those of their respective owners.**

* The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Other trademarks and trade names are those of their respective owners.
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 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.

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

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/EWG

versatile
- One-stop shopping: from pocket balances through to 15 t crane balance – everything from one supplier
- Find the product you want at lightning speed with the “Balance Quick-Finder” at www.kern-sohn.com

Order hotline
+49 7433 9933-0

Service hotline
+49 7433 9933-199

Calibration hotline
+49 7433 9933-196

Our team of consultants will assist you
from Monday to Friday from 8:00 am to 6:00 pm

Online Shop
www.kern-sohn.com

E-mail order
info@kern-sohn.com

Fax order
+49 7433 9933-146

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.
Pocket balances

Pocket size precision

Pocket balances are the ideal helpers whenever mobility and high precision are required. Since they have fewer keys, operation is simple and fast. Different weighing units stored in the pocket balance, such as g, oz, ct, gn, etc., make them universally usable. An integrated calculator allows you to use the measured weight immediately in calculations, to e.g. determine a price, quantity, average value and much more. Compact in size and well protected with a flap or protective cover, which can be used as a convenient taring container, the pocket balance is always a useful tool for mobile weighing.

- In production, to control of production weights or during the picking of small parts
- In quality control for the quick testing of small parts like plastic parts from injection moulding machines, milled parts, screws, etc.
- For mobile weighing, on-site sampling, and fast analysis wherever there’s no power outlet
- In hobbies and sports, e.g. when filling black powder, weighing parts from modelling kits etc.
- In commerce, for the fast determination of the weights of coins, jewellery, precious stones, etc.
- In veterinary sector for the weighing of small animals, the mixing of food, etc.
- In the food sector for the preparation of spice or tea mixes, for the weighing of food in line with a diet sheet.

Quick-Finder Pocket balances

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<thead>
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</table>

For an explanation on the pictos, see front flap

- Price set of 5 units
- Carat balances
- standard
- option

Pocket size precision

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Quick-Finder Pocket balances

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</table>

For an explanation on the pictos, see front flap

- Price set of 5 units
- Carat balances
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Pocket balances

Simple and convenient 4-key operation
Innovative touchscreen
Weighing pan standard
Also ideal as a gift for your customers

only € 52,-

* Price set of 5 units excl. of VAT ex works

Sally Kreidler
Product specialist Pocket balances

Tel. +49 7433 9933-305
Fax +49 7433 9933-29305
sally.kreidler@kern-sohn.com
Pocket balances KERN TEE · TCB · CM · TGC

**KERN TEE**
Designer pocket balance at a bargain price

**KERN TCB**
This is where the fun starts with pocket format weighing

**KERN CM**
Pocket balance with integrated pocket calculator

**KERN TGC**
Slim pocket balance with large stainless steel weighing plate and practical tare pan

---

**Tip:** KERN pocket scales are also ideal as a customer gift or for personalized marketing and sales campaigns. We are happy to print your logo on the cover, the lid or the packaging, from 100 pieces. Please inquire details.

---

**KERN**

<table>
<thead>
<tr>
<th>Model</th>
<th>TEE 150-1*</th>
<th>TCB 200-1*</th>
<th>CM 60-2N</th>
<th>CM 150-1N</th>
<th>CM 320-1N</th>
<th>CM 1K1N</th>
<th>TGC 150-2S05</th>
<th>TGC 500-1S05</th>
<th>TGC 1K-3S05</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weighing capacity [Max] g</strong></td>
<td>150 g</td>
<td>200 g</td>
<td>60 g</td>
<td>150 g</td>
<td>320 g</td>
<td>1000 g</td>
<td>150 g</td>
<td>500 g</td>
<td>1000 g</td>
</tr>
<tr>
<td><strong>Readability [d]</strong></td>
<td>0,1 g</td>
<td>0,1 g</td>
<td>0,01 g</td>
<td>0,1 g</td>
<td>0,1 g</td>
<td>1 g</td>
<td>0,01 g</td>
<td>0,1 g</td>
<td>1 g</td>
</tr>
<tr>
<td><strong>LCD display</strong></td>
<td>backlit, digit height 9 mm</td>
<td>backlit, digit height 12 mm</td>
<td>backlit, digit height 12 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions of weighing plate</strong></td>
<td>W×D 60×64 mm</td>
<td>Ø 80 mm</td>
<td>W×D 70×80 mm</td>
<td>Ø 81 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall dimensions</strong></td>
<td>W×D×H 67×100×22 mm</td>
<td>ø×H 80×14 mm</td>
<td>W×D×H 85×130×25 mm</td>
<td>W×D×H 100×130×18 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>Batteries included, 2×1,5 V AAA, operating time up to 50 h</td>
<td>Batteries included, 2×LR 44, AUTO-OFF function to preserve battery life</td>
<td>Batteries included, 2×1,5 V AAA, AUTO-OFF function to preserve battery life, operating time up to 33 h</td>
<td>Batteries included, 2× CR2032, operating time up to 33 h</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net weight</strong></td>
<td>100 g</td>
<td>50 g</td>
<td>180 g</td>
<td>200 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Permissible ambient temperature</strong></td>
<td>5 °C/35 °C</td>
<td></td>
<td>0 °C/40 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Price €, excl. of VAT, ex works</strong></td>
<td>40,-</td>
<td>52,-</td>
<td>79,-</td>
<td>50,-</td>
<td>55,-</td>
<td>52,-</td>
<td>99,-*</td>
<td>99,-**</td>
<td>99,-**</td>
</tr>
<tr>
<td><strong>Option Dakkās Calibr. Certificate</strong></td>
<td>963-127, 72,-</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* ONLY WHILE STOCKS LAST!

*Price set of 5 units excl. of VAT exworks*

www.kern-sohn.com · Order hotline +49 7433 9933-0
Pocket carat balances KERN CM-C · TAB · TGD

KERN CM-C
Pocket balance with carat display – ideal for jewellers

KERN TAB
High-precision pocket carat balance for jewellers and travelling salesmen

KERN TGD
Compact pocket carat balance for precision weighing of jewellery and precious stones

- **Hard case cover** as protection against pressure and dust
- **Hard case cover** as protection against pressure and dust
- **Adjusting weight standard**
- **Draft shield** against air movements standard
- **Weighing pan standard**

- **Simple and convenient 4-key operation**
- **Can be switched over from g to ct, gn at the touch of a key**
- **Hard case cover** as protection against pressure and dust
- **Adjusting weight and weighing pan standard**
- **Powder scale with Grain division (gn)**, ideal for sport shooters, reloaders etc. for self-filling cartridge cases

- **Simple and convenient 4-key operation**
- **Can be switched over from g to ct, gn, dwt, ozt, oz at the touch of a key**
- **Innovative touchscreen**: Large touch-sensitive, backlit touch display with very good contrast for easy operation and convenient reading
- **Hard case cover** as protection against pressure and dust
- **Stainless steel weighing plate**, which makes cleaning easy and hygienic
- **Weighing pan standard**
- **Powder scale with Grain division (gn)**, ideal for sport shooters, reloaders etc. for self-filling cartridge cases
- **USB cable for power supply as standard**
- **Delivered in appealing packaging**
- **Note**: The models are only delivered in a set of 5 units. I.e. the prices given in the table refer to a delivery of 5 items. Cannot be delivered individually. The calibration prices given here refer to calibration of a single balance

**Tip**: KERN pocket scales are also ideal as a customer gift or for personalized marketing and sales campaigns.
We are happy to print your logo on the cover, the lid or the packaging, from 100 pieces. Please inquire details.

<table>
<thead>
<tr>
<th>KERN</th>
<th>CM 50-C2N</th>
<th>TAB 20-3</th>
<th>TGD 50-3CS05</th>
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</thead>
<tbody>
<tr>
<td>Weighing capacity [Max] g</td>
<td>10 g</td>
<td>50 ct</td>
<td>20 g</td>
</tr>
<tr>
<td>Readability [d] [d]</td>
<td>0.0002 g</td>
<td>0.01 ct</td>
<td>0.001 g</td>
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<tr>
<td>LCD display</td>
<td>digit height 9 mm</td>
<td>backlit, digit height 9 mm</td>
<td></td>
</tr>
<tr>
<td>Dimensions of weighing plate</td>
<td>W×D 50×40 mm</td>
<td>W×D 36×42 mm</td>
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</tr>
<tr>
<td>Overall dimensions</td>
<td>W×D×H 85×130×25 mm</td>
<td>W×D×H 95×133×33 mm</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>Batteries included, AUTO-OFF function to preserve battery life, can be switched off, operating time up to 30 h</td>
<td>Batteries included, 2×1.5 V AAA, operating time up to 150 h without backlight</td>
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<tr>
<td>Net weight</td>
<td>200 g</td>
<td></td>
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<td>Permissible ambient temperature</td>
<td>5 °C/35 °C</td>
<td>10 °C/30 °C</td>
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<td>Price €, excl. of VAT, ex works</td>
<td>90,-</td>
<td>75,-</td>
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<td>Option DAkkS Calibr. Certificate</td>
<td>963-127, 72,-</td>
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KERN & SOHN GmbH
Balances, Test weights, Microscopes,
DAkkS calibration laboratory
Ziegelei 1
72336 Balingen
Germany

Tel. +49 7433 9933-0
Fax +49 7433 9933-149

info@kern-sohn.com
www.kern-sohn.com

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 outshines 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.

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! 25 years of accredited DKD laboratory 175 years of KERN & SOHN 250 years of balance manufacture in the Sauter family-owned company

2020
Construction of Ziegelei 3.0, extension of administration building

2016
Authorisation for initial verification by the manufacturer (2014/31/EU)