

POCKET BALANCES






































PROFESSIONAL MEASURING

2021



KERN Pictograms

 Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)	 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	 Battery operation: Ready for battery operation. The battery type is specified for each device
 Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required	 GLP/ISO log: The balance displays serial number, user ID, weight, date and time, regardless of a printer connection	 Rechargeable battery pack: Rechargeable set
 Easy Touch: Suitable for the connection, data transmission and control through PC, tablet or smartphone. For details see page 131	 GLP/ISO log: With weight, date and time. Only with KERN printers, see page 170–172	 Universal mains adapter: with universal input and optional input socket adapters for A) EU, CH, GB B) EU, CH, GB, USA C) EU, CH, GB, USA, AUS
 Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	 GLP/ISO log: With weight, date and time. Only with KERN printers, see page 170–172	 Mains adapter: 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available
 Alibi memory: Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard. For details see page 223	 Piece counting: Reference quantities selectable. Display can be switched from piece to weight	 Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
 Data interface RS-232: To connect the balance to a printer, PC or network	 Recipe level A: The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out	 Weighing principle: Strain gauges Electrical resistor on an elastic deforming body
 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	 Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display	 Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate
 USB data interface: To connect the balance to a printer, PC or other peripherals	 Totalising level A: The weights of similar items can be added together and the total can be printed out	 Weighing principle: Electromagnetic force compensation Coil inside a permanent magnet. For the most accurate weighings
 Bluetooth* data interface: To transfer data from the balance to a printer, PC or other peripherals	 Percentage determination: Determining the deviation in % from the target value (100 %)	 Weighing principle: Single cell technology: Advanced version of the force compensation principle with the highest level of precision
 WiFi data interface: To transfer data from the balance to a printer, PC or other peripherals	 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	 Verification possible: The time required for verification is specified in the pictogram
 Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.	 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	 DAKkS calibration possible (DKD): The time required for DAKkS calibration is shown in days in the pictogram
 Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements	 Hold function: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value	 Factory calibration (ISO): The time required for Factory calibration is shown in days in the pictogram
 Interface for second balance: For direct connection of a second balance	 Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram. For details see page 58	 Package shipment: The time required for internal shipping preparations is shown in days in the pictogram
 Network interface: For connecting the scale to an Ethernet network	 Suspended weighing: Load support with hook on the underside of the balance	 Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram

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, 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.



DakS 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 12 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



Online Shop
www.kern-sohn.com



Service hotline
+49 7433 9933-199



E-mail order
info@kern-sohn.com



Calibration hotline
+49 7433 9933-196



Fax order
+49 7433 9933-146



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



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

Readability [d] g	Weighing capacity [Max] g	Model KERN	Price excl. of VAT ex works €	Page	 DAYS	 CAL EXT	 BATT
0,001	50	TGD 50-3CS05 	260,-*	13	1	●	●
0,002	10	CM 50-C2N 	90,-	13	1	●	●
0,01	60	CM 60-2N	79,-	12	1	●	●
0,01	150	TGC 150-2S05	99,-*	12	1	●	●
0,1	150	TEE 150-1	40,-	12	1	●	●
0,1	150	CM 150-1N	50,-	12	1	●	●
0,1	320	CM 320-1N	55,-	12	1	●	●
0,1	500	TGC 500-1S05	99,-*	12	1	●	●
1	1000	CM 1K1N	52,-	12	1	●	●
1	1000	TGC 1K-3S05	99,-*	12	1	●	●

*Price set of 5 units

 = Carat balances

● = standard

○ = option

KERN TGC

Page 12

- High-resolution pocket balance
- Especially fast response and settling time
- Particularly flat design
- Stainless steel weighing plate

only €
19,80*

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



01



5x



KERN TEE

Designer pocket balance at a bargain price

KERN CM

Pocket balance with integrated pocket calculator

KERN TGC

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

STANDARD

CAL EXT BATT 1 DAY

STANDARD

CAL EXT UNIT BATT 1 DAY

STANDARD

CAL EXT UNIT BATT 1 DAY

OPTION

DAkkS +3 DAYS

OPTION

DAkkS +3 DAYS

OPTION

DAkkS +3 DAYS

- Simple and convenient 2-key operation
- Cover made of shock proof plastic as protection against pressure and dust. Can also be used as a tare cup

- Simple and convenient 4-key operation
- Hard case cover as protection against pressure and dust
- Robust, handy, well protected
- Integrated calculator

- High-resolution pocket balance with particularly rapid reaction and stabilisation time, which means that you can work extremely efficiently
- Particularly flat design
- Cover made of shock proof plastic as protection against pressure and dust. Can also be used as a tare cup
- Stainless steel weighing plate, which makes cleaning easy and hygienic
- **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 personalised 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	TEE 150-1*	CM 60-2N	CM 150-1N	CM 320-1N	CM 1K1N	TGC 150-2S05	TGC 500-1S05	TGC 1K-3S05
Weighing capacity [Max] g	150 g	60 g	150 g	320 g	1000 g	150 g	500 g	1000 g
Readability [d]	0,1 g	0,01 g	0,1 g	0,1 g	1 g	0,01 g	0,1 g	1 g
LCD display	backlit, digit height 9 mm	backlit, digit height 12 mm				backlit, digit height 12 mm		
Dimensions of weighing plate	W×D 60×64 mm	W×D 70×80 mm				ø 81 mm		
Overall dimensions	W×D×H 67×100×22 mm	W×D×H 85×130×25 mm				W×D×H 100×130×18 mm		
Power supply	Batteries included, 2× 1,5 V AAA, operating time up to 50 h	Batteries included, 2× 1,5 V AAA, AUTO-OFF function to preserve battery life, operating time up to 33 h				Batteries included, 2× CR2032, operating time up to 33 h		
Net weight	100 g	180 g				200 g		
Permissible ambient temperature	5 °C/35 °C					0 °C/40 °C		
Price €, excl. of VAT, ex works	40,-	79,-	50,-	55,-	52,-	99,-*	99,-*	99,-*
Option DAkkS Calibr. Certificate	963-127, 78,-							

* ONLY WHILE STOCKS LAST!

*Price set of 5 units excl. of VAT exworks



KERN CM-C

Pocket balance with carat display – ideal for jewellers



KERN TGD

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



STANDARD

- CAL EXT
- UNIT
- BATT
- 1 DAY

STANDARD

- CAL EXT
- UNIT
- BATT
- 1 DAY

OPTION

- DAKkS
- +3 DAYS

OPTION

- DAKkS
- +3 DAYS

- 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, 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 personalised 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	CM 50-C2N*	TGD 50-3CS05
Weighing capacity [Max] g	10 g 50 ct	50 g 250 ct
Readability [d]	0,002 g 0,01 ct	0,001 g 0,005 ct
LCD display	digit height 9 mm	backlit, digit height 12 mm
Dimensions of weighing plate	W×D 50×40 mm	ø 65 mm
Overall dimensions	W×D×H 85×130×25 mm	W×D×H 96×149×36 mm
Power supply	Batteries included, 2×1,5 V AAA, AUTO-OFF function to preserve battery life, can be switched off, operating time up to 30 h	Batteries included, 4×1,5 V AAA, operating time up to 150 h without backlight
Net weight	200 g	
Permissible ambient temperature	5 °C/35 °C	5 °C/35 °C
Price €, excl. of VAT, ex works	90,-	260,-**
Option DAkkS Calibr. Certificate	963-127, 78,-	

* ONLY WHILE STOCKS LAST!

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

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 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! 25 years of accredited DAkkS/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