

BENCH SCALES



KERN Pictograms



Internal adjusting:

Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)



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 ALIBI 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



_

古

LAN

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



INTERN

GLF

PRINTER

PCS

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

The balance displays serial number,

regardless of a printer connection

With weight, date and time. Only with

KERN printers, see page 171-173

Reference quantities selectable.

Display can be switched from piece

The weights of the recipe ingredients

can be added together and the total

weight of the recipe can be printed out

Internal memory for complete recipes

Internal memory for complete recipes

ingredients. User guidance through display, multiplier function, adjustment

of recipe when dosages are exceeded

The weights of similar items can be

added together and the total can be

Determining the deviation in % from

Percentage determination:

the target value (100 %)

see the relevant model

Hold function:

value

with name and target value of the recipe

with name and target value of the

recipe ingredients. User guidance

user ID, weight, date and time,

GLP/ISO log:

GLP/ISO log:

Piece counting:

Recipe level A:

Recipe level B:

through display

Recipe level C:

or barcode recognition

Totalising level A:

printed out

to weight



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 UNDER of the balance



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



Mains adapter:

230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available



Power supply:

Integrated in balance. 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



Weighing principle: Tuning fork



A resonating body is electromagnetically



excited, causing it to oscillate



Weighing principle: Electromagnetic force compensation

Coil inside a permanent magnet. For the most accurate weighings



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

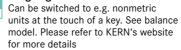
*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Other trademarks and trade names are those of their respective of

I H

SUM

%

Weighing units:



supported by an audible or visual signal,

(Animal weighing program) When the

stable weight is calculated as an average

weighing conditions are unstable, a

Weighing with tolerance range: بر رو ک (Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is

MOVE

KERN - measuring technology and testing services from a single source



Provides a complete overview of the KERN line of balances, test weights, and services such as verification, calibration, etc. Complete line of medica scales, from infant scale to patient scales, chair scales and adiposity scales, as well as hand grip dynamometers, chemist's balances and veterinary scales. 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. Test instruments for industry and commerce, such as force, coating thickness, material thickness and calibration

service.

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

i

- 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

I

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





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.

Bench scales

Compact industrial weighing technology

Thanks to their compact dimensions, low weight, robust internal mechanism and the fact that they can be operated independent of mains power, bench scales can be used not only in a stationary situation, but also as mobile scales.

With weighing ranges between 3 kg and 65 kg, bench scales can cover a wide range of applications. Whether as a commissioning scale in the warehouse, for inventory purposes, on a production work station, in quality control, in small workshops, in service cars or in sales offices, bench scales are the first choice.

Durable stainless steel weighing plates, easy to read backlit displays, useful functions such as piece counting, PRE-TARE - subtraction of a known container weight, or ► *interfaces* to PC and printer, all these support the users in their daily work.

► **Dual range** scales cover a particularly wide range of applications. With these scales, the total weighing range is divided into 2 subranges and begins with a high resolution read-out in the fine weighing range. If this range is exceeded the balance automatically switches to the higher weighing range with the lower resolution read-out.

All KERN bench scales have an adjustment program (CAL) to adjust the accuracy. In this way, the high level of accuracy is guaranteed at all times, even during harsh everyday use. Find the right test weights for you, see page 184.

Touchscreen balances

The newest development for an even greater level of user-friendliness is the intuitive touchscreen operation, which is being integrated into new KERN models, see page 58/59 (FKT), 108/109 (IKT).

NOTE: a high-quality touchscreen bench scale range (KERN GAT, page 60/61) and touchscreen platform scale range (KERN IFT, page 110/111). Thanks to the intuitive touchscreen concept and multi-lingual operation (DE, GB, IT, ES, PT, NL, FI, PL, RUS, SE, CZ) the balances can be used easily by inexperienced users, straightaway. For the professional user, the balances also provide convenient functions which permit a high level of individualisation and which thereby make operation significantly easier and quicker. Through a large memory, e.g. for item master data, weighing data etc. the balances are the ideal solution when working with a large range of goods or where there are high requirements for record keeping and documentation. Thanks to the high level of connectivity it is easy to connect barcode readers for item recognition, USB sticks for data storage or data transfer to PCs and networks using RS 232 or USB and this means that this range can be used for many different functions in Industry 4.0 applications.

► See the glossary on page 223–225

KERN

Sebastian Hipp Product specialist Bench scales

E.

only €

185,-

 Tel.
 +49 7433 9933-168

 Fax
 +49 7433 9933-29168

 sebastian.hipp@kern-sohn.com

- Simple and convenient 5-key operation
- Very fast display
- High mobility

HIGHLIGHT

KERN FCF Page 53

Readability	Weighing capacity	Weighing plate W×D	Model	Price excl. of VAT	Page	DAYS	Μ	CAL EXT	MEMORY	RS 232	PCS	-√+ ⊙ ৢ৽ TOL	-√+ ⊙ TOL	∧- Move	BATT	ACC
d] g	[Max] kg	mm	KERN	ex works €			I	For an	exnlan	ation c	n the i	nictos	see fro	nt flar	<u>ו</u>	
	-	340×240	FKB 6K0.02	520,-	57	1										
0,02	6	340×240 340×240	FKT 6K0.02	880,-	57 59	1		•	•	•	•	•		•		6
0,02	6	294×225	GAB 6K0.05N	295,-	56	1		•	-	•	•				-	
0,05	8	340×240	FKB 8K0.05	480,-	57	1		•		•	•	-		•	•	
0,05	16	340×240	FKB 16K0.05	<u> </u>	57	1		•		•	•			•		
0,05	16	340×240	FKT 16K0.05L	880,-	59	1		•		•	•	•		•		
0,03	3	253×227	FCF 3K-4	185,-	53	1		•	-	-	•	-		•		
0,1	3	253×227	FCB 3K0.1	215,-	54	1		•		•	•			•		
0,1	8	253×227	FCB 8K0.1	240,-	54	1		•		•	•			•		
0,1	8	340×240	FKB 8K0.1A	300,-	55	1		•		•	•			•		
0,1	12	294×225	GAB 12K0.1N	<u> </u>	56	1		•		•	•	•		-	<u> </u>	
0,1	12	340×240	FKB 16K0.1	480,-	57	1		•		•	•	-		•	•	
0,1	36	340×240	FKB 36K0.1	<u>480,-</u> 550,-	57	1		•		•	•			•		
0,1	36	340×240	FKT 36K0.1L	880,-	59	1		•		•	•	•		•		
0,1	6	300×225	GAT 6K-4	750,-	60	1		•		•	•	-	•		-	
0,2	30	294×225	GAB 30K0.2N	295,-	56	1		•		•	•	•	-			+
0,2	36	340×240	FKB 36K0.2	<u> </u>	57	1		•		•	•	-		•	•	+
0,2	65	340×240	FKB 65K0.2	550,-	57	1		•		•	•			•		+
0,2	65	340×240	FKT 65K0.2L	880,-	59	1		•		•	•	•		•		+
0,2	6	253×227	FCB 6K0.5	195,-	54	1		•	-	•	•	-		•		
0,5	15	340×240	FKB 15K0.5A	290,-	55	1		•		•	•			•		
0,5	15	300×225	GAT 10K-4	750,-	60	1		•		•	•		•	-		
0,5	30	340×240	FKT 30K0.5L	780,-	59	1		•	•	•	•	•	-	•	•	
0,5	65	340×240	FKB 65K0.5	510,-	57	1		•	-	•	•	-		•		
1	3	252×228	FCE 3K1N	110,-	52	1		•		-	-					
1	6	340×240	FKT 6K1LM	880,-	59	1	0	•		•	•	•		•		+
1	12	253×227	FCB 12K1	185,-	54	1	Ŭ	•	-	•	•			•		
1	15	340×240	FKB 15K1A	260,-	55	1		•		•	•			•		+
1	30	253×227	FCF 30K-3	185,-	53	1		•		-	•			•		
1	30	253×227	FCB 30K1	220,-	54	1		•		•	•			•		+
1	30	340×240	FKB 30K1A	300,-	55	1		•		•	•			•		
1	30	300×225	GAT 30K-3	750,-	60	1		•		•	•		•		-	
1	60	340×240	FKT 60K1L	730,-	59	1		•		•	•	•	-	•	•	
1	65	340×240 340×240	FKB 65K1A	320,-	55	1		•	-	•	•	-		•		
1 2	3 6	295×225	GAB 6K1DNM	225,-	56	1	0	•		•	•	•		-		
2	6	252×228	FCE 6K2N	110,-	52	1	- V	•		-	-				•	-
2	12	340×240	FKT 12K2LM	880,-	52	1	0	•	•	•	•	•		•		
2	24	253×227	FCB 24K2	185	59	1		•		•	•	-		•		
2 5	6 15	300×230	GAB 15K2DNM	225,-	56	1	0	•		•	•	•		-	<u> </u>	
2 5	10	320×260	ECE 10K-3N	95,-	51	1	⊢ Ŭ	•			-	-			•	
5	10	320×260	ECE 10K-3N ECB 10K-3N	<u>95,-</u> 110,-	51	1		•								-
5	15	252×228	FCE 15K5N	110,-	52	1		•								
5	30	340×240	FKT 30K5LM	880,-	52	1	0	•		•	•	•		•		+
5 10	15 30	294×225	GAB 30K5DNM	225,-	56	1	0	•		•	•			-	-	
10	20	320×260	ECE 20K-2N	<u> </u>	50	1	L _	•		-		-			•	
10	20	320×260	ECE 20K-2N ECB 20K-2N	<u>95,-</u> 110,-	51	1		•								
10	30	252×228	FCE 30K10N	110,-	52	1		•								
10	60	340×240	FKT 60K10LM	880,-	52	1	0	•	•	•	•	•		•		-
20	50	340×240 320×260	ECE 50K-2N	95,-	59 51	1		•		-		-		-		
20	50	320×260 320×260	ECE 50K-2N ECB 50K-2N	<u>95,-</u> 110,-	51	1		•								+

• = standard \mathbf{o} = option

05





05

Plain, mobile, uncomplicated

Features

- **I High mobility:** Battery operation, compact, lightweight construction, recessed grips on the underside and low weight make this balance ideal for use in several locations
- Particularly large weighing plate
- Very fast display: steady weight values within 2 s
- Simple and convenient 2-key operation

Technical data

- KERN ECB-N: Large backlit LCD display, digit height 21 mm
- KERN ECE-N: Large LCD display, digit height 21 mm
- Dimensions weighing surface W×D 320×260 mm
- Weighing plate material
 KERN ECE-N: plastic
 KERN ECB-N: stainless steel, see larger picture
- Overall dimensions W×D×H 320×300×60 mm
- Optional battery operation, 6×1.5 V AA, standard, operating time up to 100 h, AUTO-OFF function to preserve the battery
 Net weight
- KERN ECE-N: approx. 1,6 kg KERN ECB-N: approx. 2,6 kg
- Permissible ambient temperature 5 °C/35 °C

Accessories

- Rechargeable battery pack internal, operating time up to 30 h without backlight, charging time approx. 10 h, KERN PCB-A01, € 75,-
- Rechargeable battery pack external, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KS-A01, € 160,-
- 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,-
- External universal mains adapter, with universal input and optional input socket adapters for EU, GB, USA, KERN YKA-03N, € 32,-
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD				OPTION					
						DAkkS			
LALEXI	BATT	DMS	1 DAY	ACCU	MULTI	+3 DAYS			

Model	Weighing capacity	Readability	Reproducibility	Linearity	Price	Option	
					excl. of VAT	DAkkS Calibr. C	ertificate
	[Max]	[d]			ex works	DAkkS	
KERN	kg	g	g	g	€	KERN	€
ECE 10K-3N	10	5	5	± 20	95,-	963-128	88,-
ECE 20K-2N	20	10	10	± 40	95,-	963-128	88,-
ECE 50K-2N	50	20	20	± 80	95,-	963-128	88,-
ECB 10K-3N	10	5	5	± 20	110,- 🕚	963-128	88,-
ECB 20K-2N	20	10	10	± 40	110,- 🕚	963-128	88,-
ECB 50K-2N	50	20	20	± 80	110,- 🕚	963-128	88,-

Price reduction



Entry-level bench scale - mobile, practical, lightweight

Features

05

- Simple and convenient 2-key operation
- Very fast display: steady weight values within 3 s
- II Ideal as a compact letter and parcel scale, especially where space is limited
- Ideal as a grading, comissioning or simple checkweighing scale in production or dispatch
- Protective working cover included with delivery

Technical data

- · Large LCD display, digit height 25 mm
- Dimensions weighing surface, plastic,
- W×D 252×228 mm • Overall dimensions W×D×H
- 270×323×110 mm
- Optional battery operation, 9 V-Block not included in scope of deliveryw, operating time up to 12 h,
- AUTO-OFF function to preserve the battery • Net weight approx. 2,4 kg
- Permissible ambient temperature 5 °C/35 °C

- Protective working cover, scope of delivery: 5 items, KERN FCB-A02S05, € 40,-
- ■ Stainless steel weighing plate, robust, removable, for easy cleaning, KERN FCE-A01, € 35,-
- Rechargeable battery pack internal, operating time up to 20 h without backlight, charging time approx. 10 h, KERN FCB-A01, € 50,-

STANDAR	0		OPTION			
		B				DAkkS
CAL EXT	BATT	MULTI	DMS	1 DAY	ACCU	+3 DAYS

Model	Weighing capacity	Readability	Reproducibility	Linearity	Price	Option	
					excl. of VAT	DAkkS Calibr. Ce	ertificate
	[Max]	[d]			ex works	DAkkS	
KERN	kg	g	g	g	€	KERN	€
FCE 3K1N	3	1	2	± 3	110,-	963-127	72,-
FCE 6K2N	6	2	2	± 4	110,-	963-128	88,-
FCE 15K5N	15	5	10	± 15	110,-	963-128	88,-
FCE 30K10N	30	10	10	± 30	110,-	963-128	88,-







Compact bench scale with multi-purpose functionality and a high level of accuracy for use in industry, gastronomy and kitchen

Features

- Simple and convenient 5-key operation
- Very fast display: steady weight values within 3 s
- Ideal as a
 - compact letter and parcel scale, especially in constricted spaces
 - grading or commissioning balance or simple checkweigher in production or dispatch
 - Checkweigher in the catering trade, cafeterias, school kitchens
- High mobility: thanks to battery operation/ rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)
- Protective working cover included with delivery

Technical data

- Large backlit LCD display, digit height 25 mm
- Dimensions weighing surface, stainless steel, W×D 253×228 mm
- Overall dimensions W×D×H 270×345×106 mm
- Optional battery operation, 9 V-Block not included in scope of deliveryw, operating time up to 20 h,
- AUTO-OFF function to preserve the battery
- Net weight approx. 2,8 kg
- Permissible ambient temperature 5 °C/35 °C

- Protective working cover, scope of delivery: 5 items, KERN FCF-A01S05, € 40,-
- Rechargeable battery pack internal, operating time up to 120 h without backlight, charging time approx. 16 h, KERN GAB-A04, € 40,-

STANDARD	STANDARD									OPTION	
Ĩ	<u>.</u>	_ ^	%	C	^-–	III)	B			III)	DAkkS
CAL EXT	PCS	RECIPE	PERCENT	UNIT	MOVE	BATT	MULTI	DMS	1 DAY	ACCU	+3 DAYS

Model	Weighing capacity	Readability	Reproducibility	Linearity	Smallest part	Price	Option	
					weight	excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]			[Normal]	ex works	DAkkS	
KERN	kg	g	g	g	g/piece	€	KERN	€
FCF 3K-4	3	0,1	0,1	± 0,3	2	185,-	963-127	72,-
FCF 30K-3	30	1	1	± 3	20	185,-	963-128	88,-







Bench scale with second display on the backside of the scale

Features

05

- **I Second display** on the rear of the balance
- **PRE-TARE function** for manual subtraction of a known container weight, useful for checking fill-levels
- **High mobility:** thanks to battery operation/ rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)
- · Data interface RS-232 standard
- Protective working cover included with delivery

Technical data

- Backlit LCD display, digit height 25 mm
- Dimensions weighing surface, stainless steel, W×D 253×227 mm
- Overall dimensions W×D×H
 270×323×110 mm
- Optional battery operation, 9 V-Block not included in scope of delivery, operating time up to 12 h
- Net weight approx. 2,6 kg
- Permissible ambient temperature 5 °C/35 °C

Accessories

- Protective working cover, scope of delivery: 5 items, KERN FCB-A02S05, € 40,-
- Rechargeable battery pack internal, operating time up to 12 h without backlight, charging time approx. 10 h,
- KERN FCB-A01, € 50,-Further details, plenty of further accessories
- and suitable printers see *Accessories*

STANDARD OP										OPTION		
	• 6888.•		⊿ ▲	%	C	^	III)	B			III)	DAkkS
CAL EXT	RS 232	PCS	RECIPE	PERCENT	UNIT	MOVE	BATT	MULTI	DMS	1 DAY	ACCU	+3 DAYS

Model	Weighing capacity	Readability	Reproducibility	Linearity	Smallest part	Price	Option	
	6 1				weight	1	DAkkS Calibr. Ce	rtificate
	[Max]	[d]			[Normal]	ex works	DAkkS	
KERN	kg	g	g	g	g/piece	€	KERN	€
FCB 3K0.1	3	0,1	0,1	± 0,3	2	215,- 🕔	963-127	72,-
FCB 8K0.1	8	0,1	0,1	± 0,3	2	240,-	963-128	88,-
FCB 6K0.5	6	0,5	0,5	± 1,5	10	195,-	963-128	88,-
FCB 12K1	12	1	1	± 3	20	185,-	963-128	88,-
FCB 30K1	30	1	1	± 3	20	220,-	963-128	88,-
FCB 24K2	24	2	2	± 6	40	185,-	963-128	88,-

Price reduction



Bench scale up to 65 kg with large weighing plate

Features

- **PRE-TARE function** for manual subtraction of a known container weight, useful for checking fill-levels
- **II Particularly practical:** thanks to the large weighing capacities and compact dimensions, you can accurately weigh heavy loads in the most restricted of spaces. Useful for determining very small weight differences, such as, for example, gas wastage, abrasion of mechanical parts, rock samples, minerals, druses, silver etc.
- Large, robust weighing plate made of stainless steel, removable for easy cleaning
- Freely programmable weighing unit, e.g. display direct in special units such as length of wire g/m, surface weight g/m², or else
- Protective working cover included with delivery

Technical data

- Large backlit LCD display, digit height 25 mm
- Dimensions weighing surface, stainless steel, W×D 340×240 mm
- Overall dimensions W×D×H 350×390×120 mm
- Optional battery operation, 9 V-Block not included in scope of delivery, operating time up to 12 h
- Net weight approx. 6 kg
- Permissible ambient temperature 5 °C/35 °C

- Protective working cover, scope of delivery: 5 items, KERN FKB-A02S05, € 40,-
- Rechargeable battery pack internal, operating time up to 10 h without backlight, charging time approx. 10 h,
- KERN PCB-A01, € 75,Further details, plenty of further accessories and suitable printers see Accessories



Model	Weighing capacity	Readability	Reproducibility	Linearity	Smallest part	Price	Option	
	[]	r .1			weight		DAkkS Calibr. Ce	ertificate
KERN	[Max]	[d]	~		[Normal]	ex works	DAkkS	
KERN	kg	g	g	g	g/piece	E	KERN	€
FKB 8K0.1A	8	0,1	0,1	± 0,3	2	300,-	963-128	88,-
FKB 15K0.5A	15	0,5	0,5	± 1,5	10	290,-	963-128	88,-
FKB 15K1A	15	1	1	± 3	20	260,-	963-128	88,-
FKB 30K1A	30	1	1	± 3	20	300,-	963-128	88,-
FKB 65K1A	65	1	1	± 3	20	320,-	963-129	105,-







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 (checkweighing): 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
- 295×225 mm • Overall dimensions W×D×H 320×345×125 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 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 *Accessories*

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



Model	Weighing	Readability	Verification	Minimal load	Smallest part	Price		(Option			
	capacity		value		weight	excl. of VAT	Verification		DAkkS Calibr. Ce	rtificate		
	[Max]	[d]	[e]	[Min]	[Normal]	ex works	MII	€	DAkkS			
KERN	kg	g	g	g	g/piece	€	KERN	€	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-ra	nge balance swit	ches automatical	lly to the next larg	gest weighing ca	pacity [Max] a	nd readibility	/ [d]				
Note: F	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,-GAB 15K2DNM 6 | 15 2 | 5 2 | 5 40 5 225, 965-228 70,-GAB 30K5DNM 15 | 30 5 | 10 5 | 10 100 10 225,-965-228 70,-

* Verification not in combination with KERN CFS-A05

963-128

963-128

963-128

88,-

88,-

88,-



Large, high resolution bench scale

Features

- Thanks to the high resolution of up to 360.000 points it is ideal for high-precision weighing in the industrial field
- Housing with robust aluminium diecast housing trough, maintains the stability, protects the weighing technology elements and is robust enough to cope with everyday use
- **II Particularly practical:** thanks to the large weighing capacities and compact dimensions, you can accurately weigh heavy loads in the most restricted of spaces. Useful for determining very small weight differences, such as, for example, gas wastage, abrasion of mechanical parts, rock samples, minerals, druses, silver etc.
- **PRE-TARE function** for manual subtraction of a known container weight, useful for checking fill-levels
- Freely programmable weighing unit, e.g. display direct in special units such as length of wire g/m, surface weight g/m^2 , or else

- Model with resolution > 240.000 Pkt.: Level indicator and levelling feet for precise levelling of the scale, fitted as standard
- Protective working cover included with delivery

Technical data

- Backlit LCD display, digit height 18 mm
- Dimensions weighing surface, stainless steel, W×D 340×240 mm
- Dimensions housing W×D×H, 350×390×120 mm
- Optional battery operation, 6×1.5 V Size C not included in scope of delivery, operating time up to 40 h
- Net weight approx. 7 kg
- Permissible ambient temperature 10 $^\circ\text{C}/40$ $^\circ\text{C}$

- Protective working cover, scope of delivery: 5 items, KERN FKB-A02S05, € 40,-
- Rechargeable battery pack external, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KS-A01, € 160,-
- 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 *Accessories*

STANDARD										OPTION	
		▲^ %	C	^-–	-)	в				DAkkS
CAL EXT RS	232 PCS	RECIPE PERCENT	UNIT	MOVE	UNDER	BATT	MULTI	DMS	1 DAY	ACCU	+3 DAYS

Model	Weighing capacity Readability		Reproducibility	Linearity	Smallest part weight	Price excl. of VAT	Option DAkkS Calibr. Certificat	
KERN	[Max] kg	[d] g	g	g	[Normal] g/piece	ex works €	DAkkS KERN	€
FKB 6K0.02	6	0,02	0,04	± 0,1	0,2	520,-	963-128	88,-
FKB 8K0.05	8	0,05	0,05	± 0,15	0,5	480,-	963-128	88,-
FKB 16K0.05	16	0,05	0,1	± 0,25	0,5	580,-	963-128	88,-
FKB 16K0.1	16	0,1	0,1	± 0,3	1	480,-	963-128	88,-
FKB 36K0.1	36	0,1	0,2	± 0,5	1	550,-	963-128	88,-
FKB 36K0.2	36	0,2	0,2	± 0,6	2	510,-	963-128	88,-
FKB 65K0.2	65	0,2	0,4	± 1	2	550,-	963-129	105,-
FKB 65K0.5	65	0,5	0,5	± 1,5	5	510,-	963-129	105,-







Alibi memory

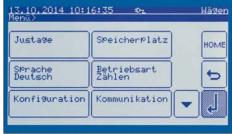
- Ring memory for up to 49,152 measuring results (744 measuring results per day!)
- Saved measuring results cannot be changed or cleared. If the maximum memory capacity is reached, then the oldest value will be overwritten
- In addition to the measuring result, the date, time, tare value, a sequential number and the serial number of the balance are also saved
- Saved measuring results can be searched and recalled easily
- The alibi memory can also be used for applications which do not require verification
- Complies with WELMEC 2.5

Touchscreen industrial scale with enormous range of functions, also with EC type approval [M]



Easy input of text and values

Using large keypad, e.g. up to 80 item descriptions, user name, packaging weights for tare containers etc.



80 memories for each mode e.g. for Checkweighing, PRE-TARE, reference weight, target value when dispensing, item descriptions, user name, weights for tare containers, etc. Easy to enter using the large-scale keypad

enu zore i cherr	latz>Kontroll	=/
Kontrolle 1	Aktiviert: Aus	HON
Bezeichnun9 Kaffee	Gewicht 200,09	
Grenze - 15,09	Grenze + 5,09	ξ -

Weighing with tolerance range (checkweighing)

Input of an upper/lower limit value. A visual and audible signal assists with portioning, dispensing or grading

Features

- **Convenient recipe weighing:** 99 In recipes with 10 components each can be stored in plain text. There is a function to adjust the other components if the initial weight was too high. The actual values and the desired values well as the proportionate percentages can be printed afterwards.
- **Multiplier function:** recipes with the ingredient weights recorded as percentage values can easily be replicated by entering a new target weight. The ideal solution for the preparation of larger containers, bulk packs etc.
- **Rapid function** for shortened stabilisation time with reduced readability
- 16 print forms which can store up to 20 different information, such as, e.g., date, time, operator, item, net, tare, gross, PCS, target weight, PRE-TARE etc. The print forms can be generated easily in an Excel list at the PC and transferred to the balance using the RS-232 interface
- Control outputs (optocoupler, digital I/O) to connect relays, signal lamps, valves etc. (35 V/80 mA)
- Protective working cover and hook for underfloor weighing standard

Technical data

- Large backlit LCD touch display, digit height 18 mm, screen diagonal 5,8" (127×74 mm)
- Dimensions weighing surface, stainless steel, W×D 340×240 mm
- Overall dimensions W×D×H
 350×390×120 mm
- Optional battery operation, $6{\times}1.5$ V Size C not included in scope of delivery, operating time up to 20 h
- Permissible ambient temperature 10 $^\circ\text{C}/40$ $^\circ\text{C}$

Accessories

- Protective working cover, scope of delivery: 5 items, KERN FKB-A02S05, € 40,-
- Rechargeable battery pack external, operating time up to 20 h without backlight, charging time approx. 10 h, KERN KS-A01, € 160,-
- RS-232/Ethernet adapter for connection to an IP-based Ethernet network, KERN YKI-01, € 290,-
- **RS-232/USB adapter**, to connect peripheral devices with USB connection, KERN AFH 12, € **85**,-
- Signal lamp for visual support of weighing with tolerance range, KERN IKT-A04, € 260,-
- Further details, plenty of further accessories and suitable printers see *Accessories*

Modes

- 1 Weighing
- ② Counting
- ③ Dispensing
 - ④ Recipe weighing
 - 5 Checkweighing
- ⁽⁶⁾ Totalising with daily total
- (\mathcal{T}) Percentage determination
- (8) Animal weighing
- (9) Surface weight
- 1 Rapid function, not for [M]

Functions

- Capacity display with 1-2, 5-7, 9-10
- Dispensing aid (-/+), with ③, ④
- Net/gross display, permanent, with (1), (3)-(5), (8)-(10)
- Variable reference quantity, with ②
- Automatic reference optimisation, with 2
- PRE-TARE numerical or from the memory unit, with (1-7), (1)
- Entering of item or batch description, operator etc., with (1-(7), (1)
- Freely programmable weighing unit, e.g. display direct in special units such as length of thread g/m, grammage g/m2, or similar, with (9)
- Date/time, with 1-10
- Statistical function, with 1
- GLP printout, with 1-10
- Individual formatting of up to 16 printer forms, recipes, operating mode master data in MS Excel, import via RS-232, for examples, see the internet, with ①- ^①

STANDARD													OPTION		FACTORY		
CAL EXT	• 688. •	-0 -0 SWITCH	PCS	RECIPE	SUM	% Percent	UNIT		MOVE	UNDER	BATT	MULTI	DMS	1 DAY	ACCU	DAkkS +3 days	H +3 DAYS

Model	Weighing	Readability	Verification	Minimal load	Smallest part	Price		(Option		
	capacity		value		weight	excl. of VAT	Verifica	tion	DAkkS Calibr. Ce	ertificate	
	[Max]	[d]	[e]	[Min]	[Normal]	ex works	MIII		DAkkS		
KERN	kg	g	g	g	g/piece	€	KERN	€	KERN	€	
FKT 30K0.5L	30	0,5	-	-	5	780,- 🖖	-	-	963-128	88,-	
FKT 60K1L	60	1	-	-	10	780,- 🕚	-	-	963-129	105,-	
High resolution readability											
FKT 6K0.02L	6	0,02	-	-	0,2	880,- 🕓	-	-	963-128	88,-	
FKT 16K0.05L	16	0,05	-	-	0,5	880,- 🕓	-	-	963-128	88,-	
FKT 36K0.1L	36	0,1	-	-	1	880,- 🕓	-	-	963-128	88,-	
FKT 65K0.2L	65	0,2	-	-	2	880,- 🕓	-	-	963-129	105,-	
Note: F	or applications tl	hat require verific	cation, please or	ler verification at	the same time, i	nitial verificat	ion at a later	date is r	ot possible.		
		Verification a	at the factory, we	need to know th	e full address of	the location o	f use.				
FKT 6K1LM	6	1	1	20	10	880,- 🖖	965-228	70,-	963-128	88,-	
FKT 12K2LM	12	2	2	40	20	880 - 🚺	965-228	70 -	963-128	88 -	

FKT 30K5LM 880,- 🕛 30 5 5 100 50 965-228 70,-963-128 880,- 🕚 FKT 60K10LM 60 10 10 200 100 965-229 93,-963-129 ONLY WHILE STOCKS LAST! Price reduction

88,-

105,

www.kern-sohn.com \cdot Order hotline +49 7433 9933-0





KERN easytouch bench scale - the intuitive way to weigh



Convenient piece-counting function Komfortable Stückzähl-Funktion Standard use: Direct input of the reference quantity or the reference weight Professional use: Recall of items to be counted from the database with all relevant additional data such as piece weight, name, reference quantity, tare container weight, tolerances. Which means a super-fast sequence when counting: select item – load – count – done!



Fill-to-target function

Programmable target quantity or target weight. A signal will be displayed when the target value is reached



Convenient weighing with tolerance range (Checkweighing)

Standard use: Direct input of the tolerances in grams or percent Professional use: Recall of items from the database with all relevant additional data

such as piece weight, name, reference quantity, tare container weight, tolerances. That leads to a super-fast sequence when portioning, dosing or sorting: Select item – load – check – done!





Features

- High-quality, rapid processors allow efficient, delay-free operation
- Thanks to the intuitive touchscreen concept and multi-lingual operation (DE, GB, FR, IT, ES, PT, NL, FI, PL, RUS, SE, CZ) the balance can be used easily by inexperienced users, straightaway. For the professional user, the balance provides convenient functions which permit a high level of individualisation and which thereby make operation significantly easier and quicker.
- Through a large memory (256 MB), e.g. for item master data, weighing data etc. the balance is the ideal solution when working with a large range of goods or where there are high requirements for record keeping and documentation
- II Thanks to the high level of **connectivity** it is easy to connect USB sticks for data storage or data transfer to PCs, scales and networks using RS-232 or USB. This means that this range can be used for many different functions in Industry 4.0 applications
- Convenient recipe weighing
 Standard use: Direct input of the recipe
 ingredients in grams or percent
 Professional use: Recall of items from the
 database with all relevant additional data
 such as target value, tolerances, name, tare
 container weight. That leads to a super-fast
 sequence when recipe-weighing: select
 recipe weigh done!

A graphic signal helps when dosing individual recipe ingredients. An information column on the lefthand edge of the screen allows you to see at a glance which ingredients have already been weighed (proportionately). Recipes can be easily transferred via USB stick between the KERN touchscreen scales GAT or IFT

- **Take-Out function:** allows you to remove the same quantity every time, e.g. when portioning in cafeterias or when picking small parts. A colour bar graph shows whether the quantity removed is below the limit or within the specified tolerances (blue) or is above the limit (red)
- **Classifying:** Similar objects are automatically classified according to their weight into predetermined classes.
- AUTO-PRINT function: Automatic printing of the weighing when the weighing value remains unchanged. The print function as well as the content of the print-out can be adjusted individually depending on the operating mode
- 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
- I The battery compartment of the device can be opened easily, which means it is possible to change the batteries without having to use any tools or break any verification seal labels etc.

Technical data

- Large backlit LCD touch display, digit height 12 mm, screen diagonal 7" (155×85 mm)
- Dimensions weighing surface, stainless steel, W×D 300×225 mm
- Overall dimensions W×D×H
 315×350×120 mm

Accessories

- Rechargeable battery pack internal, operating time up to 40 h with backlight, charging time approx. 12 h, KERN GAB-A04, € 40,-
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD											OPTION					
CAL EXT	MEMORY	RS 232	USB		KCP PROTOCOL	GLP INTERN	PCS		% Percent		-√+ ⊙ TOL		DMS	1 DAY	ACCU	DAkkS +3 days

Model	Weighing capacity	leighing capacity Readability		Linearity	Smallest part	Price	Option	
						excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]			[Normal]	ex works	DAkkS	
KERN	kg	g	g	g	g/piece	€	KERN	€
GAT 6K-4	6	0,2	0,4	± 0,6	2	750,-	963-128	88,-
GAT 10K-4	15	0,5	0,5	± 1,5	5	750,-	963-128	88,-
GAT 30K-3	30	1	2	± 3	10	750,-	963-128	88,-

ONLY WHILE STOCKS LAST!

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



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



A proud Gottlieb Kern with his staff





1880 Pharmaceutical balance with Aesculap



AUTHORISATION FOR INITIAL VERIFICATION

1923

Inflation – KERN wages are paid with self printed currency



1980 The electronic balance ousts mechanical devices



Accredited DKD laboratory (ISO 17025)



New premises in Balingen



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



and refractometers)



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



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



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



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



Expansion of the product range to include optical instruments (microscopes



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



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



Construction of Ziegelei 3.0, extension of administration building

Printed in Germany by KERN & SOHN GmbH z-cb-gb-kp-20201