TRADITION AND INNOVATION - 169 YEARS OF KERN

Independent and family-run, KERN is already in its 6th generation and is synonymous with quality and reliability in customer service.

FAST

- 24 hours delivery service order today, on its way tomorrow
- Sales & service hotline from 8:00 am to 6:00 pm

COMPETENT

- DKD accreditation (DIN EN ISO/IEC 17025)
- QM system (DIN EN ISO 9001:2008)
- Initial verification by the manufacturer (2009/23/ECC)
- Medical (DIN EN ISO 13485 & 93/42/EWG)

RELIABLE

- 2+ years warranty
- Precision in weighing technology for the last 169 years

DIVERSE

- One-stop shopping: from pocket balances through to floor scales everything from one supplier
- Find the balance you want in no time with the "Balance Quick-Finder"



KERN - Professional measuring.



WAAGEN · GEWICHTE · BALANCES · WEIGHTS

ŠTEVNE TEHTNICE / ŠTEVNI SISTEMI



8 Counting scales / Counting systems

KERN	Model	Page
СХВ	Entry level model in professional counting, also with EC type approval [M], counting resolution of 30,000 points	81
СРВ	The economical model, also with EC type approval [M], counting resolution of 60,000 points	82
CFS	Professional counting scale with 100 item memories and second balance interface, counting resolution up to 75,000 points	83
CKE	Easy to use, self-explanatory counting balance with laborat accuracy, counting resolution up to 361,000 points	tory 84
IFS-N	Industrial counting scale with convenient keypad for easy data entry, counting resolution up to 60,000 points	85
CDS	Easy to use industrial counting scale for heavy loads, counting resolution up to 300,000 points	86
ccs	Counting the smallest parts in the largest quantities, counting resolution up to 6 Mio. points	87



Counting, doing it right!

In order to be able to count correctly, you must take a few parameters into account when you first start to consider selecting a counting scale.

Smallest part weight "PW min"

This is the smallest piece weight the scale will accept for piece counting and displaying piece count. In practice, however, depending on the required accuracy, using higher numbers of parts is recommended for the smallest counted parts, see "Smallest reference weight".

→ Counting resolution

Describes the maximum quantity which can be counted with a counting accuracy of 1%, with the minimum variation of item weights and a sufficiently large reference quantity (20 pieces with counting resolution $\leq 60,000$ points, 50 pieces from 60,000 - 150,000 points, 100 pieces \geq 150,000 points). This is therefore a measure of the quality of the counting scale.

Recommended → reference quantity

The weight tolerances of the pieces to be counted are the largest sources of error when counting. Therefore, at the start of every counting procedure, establish an average weight, the so-called reference weight, by placing several pieces on the scale, the so-called reference quantity. Usually this would be:

5 pieces >> often sufficient

10 pieces >> common practise

20+ pieces >> with large range of piece weights

The "automatic reference optimisation" function increases

the reference quantity in levels, whereby the average piece weight is optimised step by step. This contributes considerably to the accuracy of the subsequent counting processes.

Smallest → reference weight

Without automatic reference optimisation:

5 x PW min >> for low level requirements

10 \times PW min >> common practise

20+ x PW min >> recommended value with large range of piece weights

With automatic reference optimisation:

2 x PW min >> generally sufficient

Which counting scale for which application?

Simple counting scale

with self-explanatory user guidance on the keyboard. The graphics control panel enables you to start working immediately, without having to study the user manual. Easy handling, value for money.

Professional counting scale

with 3 separate displays for reference weight (average weight of the pieces), total weight of all pieces and total piece count of all pieces. Integrated memories are very useful, e.g. for container weight, item number, reference weight as well as audible and visual counting assistance and an alphanumeric key pad for easy data entry.

A special tip for counting large quantities: Counting systems

The weighing ranges of bench counting scales are often not sufficient to count large quantities, units, items on pallets, etc. This is where high-performance counting systems come into their own, as these combine a high-precision reference balance with a high-capacity bulk scale.

→ See the glossary on page 158/159



Your KERN product specialist will be happy to help:

Tanja Jetter
Product specialist counting scales

Quick-Finder

■ = Standard

 \square = Option

Read-out	Weighing range	Model	Page	-	M				□↔□	**	-√ +		
	rango			DAYS ready for	لتتنا	CAL EXT	MEMORY	RS 232	DUAL	PCS	TOL	ACCU	BATT
d	Max	KERN		shipping		For an e	explanatio	on of the s	ymbols, s	see the fla	ap of the e	envelope	
0,01 g	2 kg	CKE 2000-2	84	1									
00,1 g	3 kg	CFS 3K-5	83	1									
0,01 g	3,6 kg	CKE 3600-2	84	1									
0,02 g	6 kg	CKE 6K0.02	84	1									
0,05 g	8 kg	CKE 8K0.05	84	1									
0,05 g	8 kg	CDS 8K0.05	86	1									
0,05 g	15 kg	CDS 15K0.05	86	1									
0,05 g	16 kg	CKE 16K0.05	84	1									
0,1 g	6 kg	CPB 6K0.1N	82	1									
0,1 g	6 kg	CFS 6K0.1	83	1									
0,1 g	16 kg	CKE 16K0.1	84	1									
0,1 g	16 kg	CDS 16K0.1	86	1									
0,1 g	30 kg	CDS 30K0.1	86	1									
0,1 g	30 kg	CDS 30K0.1L	86	1									
0,1 g	30 kg	CCS 30K0.1	87	2 *									
0,1 g	36 kg	CKE 36K0.1	84	1									
0,1 g	60 kg	CCS 60K0.1	87	2 *									
0,1 g	60 kg	CCS 60K0.1L	87	2 *									
0,1 g	150 kg	CCS 150K0.1	87	2 *									
0,1 g	150 kg	CCS 150K0.1L	87	2 *									
0,1 g	300 kg	CCS 300K0.1	87	2 *									
0,2 g	3 kg	CXB 3K0.2	81	1									
0,2 g	15 kg	CPB 15K0.2N	82	1									
0,2 g	15 kg	CFS 15K0.2	83	1									
0,2 g	36 kg	CDS 36K0.2L	86	1									
0,2 g	60 kg	CDS 60K0.2	86	1									
0,2 g	65 kg	CKE 65K0.2	84	1									
0,5 g	6 kg	CXB 6K0.5	81	1								_	
0,5 g	30 kg	CPB 30K0.5N	82	1									
0,5 g	30 kg	CFS 30K0.5	83	1									
0,5 g	65 kg		84	1									
0,5 g	100 kg	CDS 100K0.5	86	1									
1 g	3 kg	CXB 3K1M	81	1								_	
1 g	15 kg	CXB 15K1	81	1								_	
1 g	50 kg	CFS 50K-3	83	1									
1/2 g	3/6 kg		82	1									
2 g	6 kg	CXB 6K2M	81	1								_	
2 g	30 kg	CXB 30K2	81	1								_	
2/5 g	6/15 kg	CPB 15K2DM	82	1									
5 g	15 kg	CXB 15K5M	81	1								_	
5/10 g	15/30 kg	CPB 30K5DM	82	1									
10 g	30 kg	CXB 30K10M	81	1								_	

08

Counting scale KERN CXB





Entry level model in professional counting, also with EC type approval [M], counting resolution of 30,000 points

Features

- Precise counting: The automatic optimisation of reference weight gradually improves the average value of the piece weight
- Programmable using numerical key pad:
 - known reference weight
- required reference quantity
- Three displays for Weight (verifiable) Reference weight Total weight
- Audible Fill-to-target: target quantity or target weight can be programmed. When the target value is reached, a signal will sound

- Counting results memory: adds up all individual counting operations, result is shown in total weight and total pieces
- Energy management: Backlight turns off after 5 sec
- Soil-resistant construction with water channels at the edge of the housing and sealing rings over the upper housing inlets
- PRE-TARE function for manual subtraction of a known container weight, which can be

Technical data

- Large backlit LCD displays, digit height 18 mm
- Dimensions of weighing plate (stainless steel) WxD 300x225 mm
- Dimensions housing WxDxH 300x330x110 mm
- Rechargeable battery pack internal, standard, operating time approx. 200 h without backlight, charging time approx. 8 h, charge condition indicator on display
- Net weight approx. 4 kg
- Permissible ambient temperature -10 °C / 40 °C

Accessories

965-228

• Protective working cover over keyboard and housing, standard, can be reordered, KERN CXB-A01



CXB 30K10M











10



10

200





Model	Weighing	Read-	Verific.	Minimum	Min. piece	Counting		Ор		ions	
	range	out	value	load	weight	resolution		Verific	cation	DKD Calibr.	Certificate
	[Max]	[d]	[e]	[Min]	[PW min]			MIII		DKD	
KERN	kg	g	g	g	g/piece	Points		KERN		KERN	
CXB 3K0.2	3	0,2	-	-	0,1	30.000		-	-	963-127	
CXB 6K0.5	6	0,5	-	-	0,2	30.000		-	-	963-128	
CXB 15K1	15	1	-	-	0,5	30.000		-	-	963-128	
CXB 30K2	30	2	-	-	1	30.000		-	-	963-128	
No	te: For applic	ations that red	quire verificati	on, please ord	der verification	at the same	time, initial ve	rification at a	later date is r	not possible.	
		Ve	erification at t	he factory, we	need to know	the full addre	ess of the loca	ition of use.			
CXB 3K1M	3	1	1	20	0,1	30.000		965-227		963-127	
CXB 6K2M	6	2	2	40	0,2	30.000		965-228		963-128	
CXB 15K5M	15	5	5	100	0,5	30.000		965-228		963-128	

30.000

30

963-128







The economical model, also with EC type approval [M], counting resolution up to 60,000 points

Features

- Precise counting: The automatic optimisation of reference weight gradually improves the average value of the piece weight
- Programmable using numerical key pad:
 - required reference quantity
- known reference weight
- Target piece input check-weighing with an audible signal
- Counting results memory: adds up all individual counting operations, result is shown in total weight and total pieces
- Audible Fill-to-target: target quantity or target weight can be programmed. When the target value is reached, a signal will sound

• II High mobility: thanks to battery operation (optional), compact, flat construction and low weight, it is suitable for use in several locations (production, warehouse, dispatch department,...)

Technical data

- · Large backlit LCD displays, digit height 20 mm
- · Dimensions of weighing plate (stainless steel) WxDxH 294x225 mm
- Overall dimensions WxDxH 320x350x125 mm
- Net weight approx. 3,9 kg
- Permissible ambient temperature 0 °C / 40 °C

Accessories

- Protective working cover, KERN CFS-A02
- Rechargeable battery pack internal, operating time up to 90 h without backlight, charging time approx. 14 h, can be reordered, KERN GAB-A04
- Signal lamp for visual support of weighing with tolerance range, KERN CFS-A03
- 2nd data interface, Y cable for parallel connection of two terminal devices to the RS 232 interface of the balance, e.g. of a printer, signal lamp etc. KERN CFS-A04
- Suitable printers see page 130































Model	Weighing	Read-	Verific.	Minimum	Min. piece		Opt	ions	
	range	out	value	load	weight	Verific	cation	DKD Calibr	. Certificate
	[Max]	[d]	[e]	[Min]	[PW min]	MIII		DKD	
KERN	kg	g	g	g	g/piece	KERN		KERN	
CPB 6K0.1N	6	0,1	-	-	0,1	-	-	963-128	
CPB 15K0.2N	15	0,2	-	-	0,25	-	-	963-128	
CPB 30K0.5N	30	0,5	_	_	0,5	-	-	963-128	

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 run address of the foodilon of disc.											
	Dual-range balance (D=Dual): switches from readout d1 to readout d2 automatically											
CPB 6K1DM	3 6	1 2	1 2	20	0,1	965-228	963-128					
CPB 15K2DM	6 15	2 5	2 5	40	0,25	965-228	963-128					
CPB 30K5DM	15 30	5 10	5 10	100	0,5	965-228	963-128					

Counting scale KERN CFS







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

Features

- Memory (PLU) for 100 items with additional text, reference weight and tare weight, e.g. of a container
- · Weighing with tolerance range (checkweighing), ideal for portion division, dispensing, grading, only in weighing and counting mode
- Programmable using numerical key pad:
- required reference quantity
- known reference weight
- Fill-to-target function: Programmable target quantity or target weight. An acoustic and visual signal will be displayed when the target value is reached
- Precise counting: The automatic optimisation of reference weight gradually improves the average value of the piece weight

• III Interface for second balance to construct a high-resolution counting system, e.g. with weighing bridges KFP V20 (see page 114)

Technical data

- · Large backlit LCD displays, digit height 20 mm
- Dimensions of weighing plate WxD A 294x225 mm **B** 240x370 mm
- Dimensions housing WxDxH A 320x350x125 mm **B** 370x360x125 mm
- Net weight approx. 3,8 kg
- Permissible ambient temperature 0 °C / 40 °C

Accessories

- Signal lamp for visual support of weighing with tolerance range, WxDxH 100x180x300 mm, KERN CFS-A03
- 2nd data interface, Y cable for parallel connection of two terminal devices to the RS 232 interface of the balance, e.g. of a printer, signal lamp etc. KERN CFS-A04
- · Rechargeable battery pack internal, operating time up to 70 h without backlight, charging time approx. 14 h, can be reordered, only for models with weighing plate sizes A, KERN GAB-A04
- Protective working cover over keyboard and housing standard, can be reordered, only for models with weighing plate sizes A, KERN CFS-A02
- Suitable printers see page 130

STANDARD

























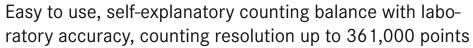




Model	Weighing range	Read- out	Repro- duzier-	Linea- rity	Min. piece weight	Weighing plate	Option DKD Calibr. Certificate
KERN	[Max] kg	[d] g	barkeit g	g	[PW min] g/piece		DKD KERN
CFS 3K-5	3	0,01	0,02	± 0,04	0,05	А	963-127
CFS 6K0.1	6	0,1	0,1	± 0,2	0,1	Α	963-128
CFS 15K0.2	15	0,2	0,2	± 0,4	0,2	Α	963-128
CFS 30K0.5	30	0,5	0,5	± 1	0,5	Α	963-128
CFS 50K-3	50	1	1	± 2	1	В	963-128

New model





Features

- Self-explanatory graphic control panel, even without operating instructions, the counting process can be understood immediately.
- no learning time = reduces costs
- ideal for untrained users
- visualised process means that operating errors are avoided
- The 4 steps are carried out from left to right: Place the empty container onto the weighing plate and tare by pressing the TARE key
- Place the reference quantity for the goods to be counted into the container (5, 10, or 20 pieces)
- Confirm the selected reference quantity by pressing the key (5, 10 or 20)
- 4 Pour in the goods to be counted.

The number of pieces will immediately be shown on the display

- Precise counting: The automatic optimisation of reference weight gradually improves the average value of the piece weight
- Two balances in one: Switching from counting mode to weighing mode at the touch of a button

Technical data

- · Large backlit LCDdisplay A digit height 9 mm
- B digit height 18 mm
- · Dimensions of weighing plate (stainless steel) WxD
- A 150x170 mm
- B 340x240 mm, see larger picture
- Overall dimensions WxDxH
- A 167x250x85 mm
- **B** 350x390x120 mm



- Optional battery operation for models with weighing plate sizes **B**, batteries (6 x 1.5 V Size C) not standard, operating time approx. 70 h
- Net weight for models with weighing plate sizes
- A approx. 1,4 kg
- B approx. 6,5 kg
- Permissible ambient temperature 10 °C / 40 °C

Accessories

- Protective working cover over keyboard and housing standard, can be reordered, for models with weighing plate sizes A KERN PCB-A05
- **B** KERN FKB-A02
- · Rechargeable battery pack external, operating time up to 25 h, charging time approx. 10 h, KERN KS-A01
- Rechargeable battery pack internal only for models with weighing plate sizes A, operating time approx. 25 h, charging time approx. 10 h, can be reordered, KERN KB-A01N
- Suitable printers see page 130

































Model	Weighing range	Read- out	Min. piece weight	Counting resolution	Weighing plate	Option DKD Calibr. Certificate
	[Max]	[d]	[PW min]			DKD
KERN	kg	g	g/piece	Points		KERN
CKE 2000-2	2	0,01	0,01	201.000	Α	963-127
CKE 3600-2	3,6	0,01	0,01	361.000	Α	963-127
CKE 6K0.02	6	0,02	0,02	305.000	В	963-128
CKE 8K0.05	8	0,05	0,05	162.000	В	963-128
CKE 16K0.05	16	0,05	0,05	322.000	В	963-128
CKE 16K0.1	16	0,1	0,1	161.000	В	963-128
CKE 36K0.1	36	0,1	0,1	361.000	В	963-128
CKE 65K0.2	65	0,2	0,2	325.500	В	963-129
CKE 65K0.5	65	0.5	0.5	130.000	В	963-129

Counting scale KERN IFS





Industrial counting scale with convenient keypad for easy data entry, now with counting resolution to 60,000 points

Features

- Industrial quality: because of its stable construction and robust design, it is ideal for continuous use in industrial applications
- Benchtop stand incl. wall mount for display device as standard
- Precise counting: The manual optimisation of reference weight gradually improves the average value of the piece weight
- Level indicator and foot screws to level the balance precisely, fitted as standard, to give the most accurate weighing results
- Totalizing of counting operations

Technical data

- Backlit LCD displays, digit height 16,5 mm
- Dimensions of weighing plate (stainless steel) WxDxH
- A 300x240x128 mm
- **B** 500x400x137 mm
- © 650x500x142 mm, see larger picture
- Dimensions of display device WxDxH 260x150x65 mm
- Cable length of display device approx. 2,5 m
- Permissible ambient temperature 0 °C / 40 °C

Accessories

- 11 Stand to elevate display device, height of stand approx. 330 mm, KERN IFB-A01 height of stand approx. 600 mm, for models with weighing plate sizes B and C, KERN IFB-A02
- Protective working cover standard, can be reordered, KERN KFB-A02
- · Rechargeable battery pack internal, operating time up to 30 h, charging time approx. 12 h, can be reordered, KERN KFS-A01
- Suitable printers see page 130























nkn
+3 DAYS

Model	Weighing range	Read- out	Min. piece weight	Counting resolution	Net weight	Weighing plate	Option DKD Calibr. Certificate
	[Max]	[d]	[PW min]		approx.		DKD
KERN	kg	g	g/piece	Points	kg		KERN
IFS 10K-4	6 15	0,1 0,2	0,25	60.000	6,5	Α	963-128
IFS 100K-3	75 150	1 2	2,5	60.000	14	В	963-129
IFS 100K-3L	75 150	1 2	2,5	60.000	24	С	963-129
IFS 300K-3	150 300	2 5	5	60.000	24	С	963-129





Easy to use industrial counting scale for heavy loads, counting resolution up to 300,000 points

Features

- Self-explanatory graphic control panel, Even without operating instructions, the counting process can be understood immediately
- No learning time = reduces costs
- Ideal for untrained users
- Visualised process means that operating errors are avoided
- Precise counting: The automatic optimisation of reference weight gradually improves the average value of the piece weight

Technical data

- Backlit LCDdisplay, digit height 18 mm
- Dimensions of weighing plate (stainless steel) WxDxH A 308x318x75 mm **B** 450x350x115 mm
- Dimensions of display device WxDxH 225x115x60 mm
- Permissible ambient temperature 10 °C / 40 °C

Accessories

• Protective working cover over the display device, standard, can be reordered, KERN DE-A12

- Wall mount for display device, KERN DS-A02
- Mount to fasten the display device to the platform, KERN DE-A11N
- 11 Stand to elevate display device, height of stand approx. 450 mm, KERN DE-A10
- Rechargeable battery pack external, operating time up to 15 h, charging time approx. 10 h, KERN KS-A01
- · Rechargeable battery pack internal, operating time up to 15 h, charging time approx. 10 h, can be reordered, KERN KB-A01N
- Suitable printers see page 130

STANDARD











only A













Model	Weighing range	Read- out	Min. piece weight	Counting resolution	Net weight	Cable Length approx.	Weighing plate	Option DKD Calibr. Certif	icate
	[Max]	[d]	[PW min]		approx.			DKD	
KERN	kg	g	g/piece	Points	kg	m		KERN	
CDS 8K0.05	8	0,05	0,05	162.000	7,5	2	Α	963-128	
CDS 15K0.05	15	0,05	0,05	302.000	7,5	2	Α	963-128	
CDS 16K0.1	16	0,1	0,1	161.000	7,5	2	Α	963-128	
CDS 30K0.1	30	0,1	0,1	301.000	7,5	2	Α	963-128	
CDS 30K0.1L	30	0,1	0,1	301.000	9,5	0,6	В	963-128	
CDS 36K0.2L	36	0,2	0,2	180.500	9,5	0,6	В	963-128	
CDS 60K0.2	60	0,2	0,2	300.500	9,5	0,6	В	963-129	
CDS 100K0.5	100	0,5	0,5	202.000	9,5	0,6	В	963-129	

Counting system KERN CCS





Information on other high-capacity bulk balances, such as, for example, pallet scales, drive-through scales or floor scales is available on request, for information on other counting systems with the KERN CFS reference balance (d = 0.1 g), please refer to the website.

Counting the smallest parts in the largest quantities, counting resolution up to 6 Mio. points

Features

• With this highly-accurate KERN CCS counting system you can replace a large spectrum of individual counting scales

Reference scale KERN CFS:

This professional KERN CFS counting scale, which can also be used as a stand-alone scale, meets even the highest demands for accuracy, weighing range and volume of items, by connecting it to a high-capacity weighing bridge

- Programmable using numerical key pad:
 - required reference quantity
- known reference weight
- Memory (PLU) for 100 items with additio-
- Fill-to-target function: Programmable target weight. An acoustic and visual signal will be displayed when the target value is reached

- Precise counting: The automatic optimisation of reference weight gradually improves the average value of the piece weight
- Details page 83

Quantity scale KERN KFP: The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge) KERN KFP

- Stainless steel platform, Steel substructure lacquered
- Aluminium singlepoint load cell (1 x 3000 e), IP65 protection
- Details page 114

Technical data

KFP:

- Dimensions of weighing plate (stainless steel) WxDxH
 - A 400x300x128 mm B 500x400x137 mm © 650x500x142 mm
- Connection cable approx. 1,5 m

- Large backlit LCD displays, digit height 20 mm
- Overall dimensions WxDxH 320x350x125
- Dimensions of weighing plate (stainless steel) WxD 294x225 mm
- Net weight approx. 3,8 kg

Accessories

CFS:

- Reference scale also available separately, details see page 80, KERN CFS 6K0.1
- · Rechargeable battery pack internal, operating time approx. 60 h, charging time approx. 14 h, KERN GAB-A04, € 40,-
- **ISignal lamp for visual support of weighing with tolerance range, WxDxH 100x180x300 mm, KERN CFS-A03
- 2nd data interface, Y cable for parallel connection of two terminal devices to the RS 232 interface of the balance, e.g. of a printer, signal lamp etc. KERN CFS-A04
- Suitable printers see page 130







































Model	Quantity scale	Weighing range	Read- out	Weighing plate	Reference scale	Weighing range	Read- out	Min. piece weight [PW min]	Option DKD Calibr. Certifica
KERN	KFP	[Max] kg	[d] g		CFS	[Max] kg	[d] g	g/piece	KERN
CCS 30K0.01	KFP 30V20M	30	10	Α	CFS 3K-5	3	0,01	0,05	962-128-128
CCS 30K0.1	KFP 30V20M	30	10	Α	CFS 6K0.1	6	0,1	0,1	962-129-128
CCS 60K0.01	KFP 60V20M	60	20	Α	CFS 3K-5	3	0,01	0,05	962-129-128
CCS 60K0.01L	KFP 60V20LM	60	20	В	CFS 3K-5	3	0,01	0,05	962-129-128
CCS 60K0.1L	KFP 60V20LM	60	20	В	CFS 6K0.1	6	0,1	0,1	962-129-128
CCS 150K0.01	KFP 150V20M	150	50	В	CFS 3K-5	3	0,01	0,05	962-129-128
CCS 150K0.01L	KFP 150V20LM	150	50	С	CFS 3K-5	3	0,01	0,05	962-129-128
CCS 150K0.1	KFP 150V20M	150	50	В	CFS 6K0.1	6	0,1	0,1	962-129-128
CCS 300K0.01	KFP 300V20M	300	100	С	CFS 3K-5	3	0,01	0,05	962-129-128