



# COUNTING SCALES, COUNTING SYSTEMS

#### **Interesting Facts about Counting**

#### Smallest part weight for piece counting

This is the smallest piece weight the scale will accept for piece counting and will display it piece by piece. In practice, depending on the required accuracy, we recommend to choose a counting scale with a minimum piece weight smaller than the weight of the item to be counted. To make it easier for you to select the right model, we specify the smallest part weight when counting under laboratory conditions and normal conditions, see the website.

#### ► Counting resolution

Describes the maximum quantity which can be counted with a counting accuracy of 1 %, with a minimum variation of item weights and a sufficiently large ► reference quantity (20 pieces with counting resolution ≤ 60,000 points, 50 pieces from 60,000–150,000 points, 100 pieces ≥ 150,000 points). This therefore is an indication of the quality of the counting scale.

#### Recommended ► reference quantity

Weight tolerances of pieces to be counted are the most significant 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 balance, the so-called reference quantity. Usually this would be:

5 pieces >> often sufficient

10 pieces >> common practise

20-100 pieces >> for large deviations among

piece weights

The "automatic ➤ reference optimisation" function increases the reference quantity gradually, whereby the average piece weight is optimised step by step. This contributes considerably to the accuracy of the subsequent counting processes.

#### Which Counting Scale for Which Application?

#### Simple counting scale

With self-explanatory user guidance on the keyboard. The graphic control panel enables you to start working immediately, without having to consult 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 quantity of all pieces. Very useful integrated memories, e.g. for container weight, item number, reference weight as well as audible and visual counting aids and an alphanumeric key pad for easy data entry.

#### Special tip for counting large quantities: Counting systems

The weighing capacities of bench counting scales are often not sufficient to count large quantities, units, palletized items, etc. In this case, high-performing counting systems come into operation, as these combine a high-precision reference scale with a high-capacity bulk scale.

#### ► See the Glossary

## **Quick-Finder Counting Scales/Counting Systems**

Readability	Weighing- capacity	Smallest part weight	Counting Resolution	Model	Page	DAYS	M	CAL EXT	-√+ ③ Ͽ» TOL	MEMORY		<b>즈⇔</b> 즈 DUAL	BATT	ACCU
[d] g	[Max] kg	(Normal) g/piece	Points	KERN		Fo	r an e	xplana	tion on	the pi	ctos, se	ee the	front fl	lap
0,001	0,3	0,05	60.000	CFS 300-3	90	1		•	•	•	•	•		0
0,001	0,36	0,02	180.000	CKE 360-3	91	1		•	•		0		•	0
0,001	6	0,05	1.200.000	CCS 6K-6	96	1		•	•	•	•			0
0,001	15	0,05	3.000.000	CCS 10K-6	96	1		•	•	•	•			0
0,01	3   6	0,2	300.000	CCA 6K-5M	94	1	0	•	•	•	•			0
0,01	3	0,5	60.000	CFS 3K-5	90	1		•	•	•	•	•		0
	3,6	0,2	180.000	CKE 3600-2	91	1		•	•		0		•	0
0,01	6   15	0,2	750.000 1.500.000	CCA 10K-5M CCA 30K-5M	94 94	1	0	•	•	•	•			0
0,01	30   60	0,2	3.000.000	CCA 60K-5M	94	1	0	•	•					0
0,01	30	0,5	600.000	CCS 30K0.01.	96	1		•	• 4	•				0
0,01	60   150	0,2	7.500.000	CCA 100K-5M	94	1	0	•	•	•	•			0
0,01	60	0,5	1.200.000	CCS 60K0.01.	96	1		•		•	•			0
0,01	60	0,5	1.200.000	CCS 60K0.01L.	96	1		•	•		•			0
0,01	150	0,5	3.000.000	CCS 150K0.01	96	1	- /	•		•	•			0
0,01	150	0,5	3.000.000	CCS 150K0.01L	96	3	1	•		•				0
0,01	300	0,5	6.000.000	CCS 300K0.01	96	3		•		•	• /			0
0,02	4	0,2	200.000	CDS 4K0.02	93	1		•			0			0
0,02	6	0,2	300.000	CKE 6K0.02	91	1		•	•		0		•	0
0,05	8	0,5	160.000	CKE 8K0.05	91	1		•	•//		0		•	0
0,05	15	0,5	300.000	CDS 15K0.05	93	1		•	•		0			0
0,05	16	0,5	320.000	CKE 16K0.05	91	1		•			0		•	0
	3   6	1	60.000	IFS 6K-4S	92	1		•		•	•			0
	6   15	2	75.000	IFS 10K-4	92	1		• ^	• •	•	•			0
0,1	3   6	1	60.000	CCA 6K-4M CPB 6K0.1N	94	2	0	•	•	•	•			0
0,1	6	1	60.000	CFS 6K0.1N	90	1		•	•	•	•	•		0
0,1	15   30	1	300.000	CCA 30K-4M	94	2	0	•	•	•	•			0
0,1	16	1	160.000	CKE 16K0.1	91	1	0	•	-				•	0
0,1	16	1	160.000	CDS 16K0.1	93	1		•	•		0			0
	30   60	1	600.000	CCA 60K-4M	94	2	0	•	•	•	•			0
	30	1	300.000	CDS 30K0.1	93	1		•	•		0			0
	30	1	300.000	CCS 30K0.1.	96	2		•	•	•	•			0
0,1	30	1	300.000	CDS 30K0.1L	93	1		•	•		0			0
0,1	36	1	360.000	CKE 36K0.1	91	1		•	•		0		•	0
0,1	60   150	1	1.500.000	CCA 100K-4M	94	2	0	•	•	•	•			0
0,1	60	1	600.000	CCS 60K0.1.	96	2		•	•	•	•			0
0,1	60	1	600.000	CCS 60K0.1L.	96	2		•	•	•	•			0
0,1	150	1	1.500.000	CCS 150K0.1.	96	2		•	•	•	•			0
0,1	150	1	1.500.000	CCS 150K0.1L	96	3		•	•	•	•			0
0,1	300	1	3.000.000	CCS 300K0.1	96	3 4**		•	•	•	•			0
	1500	1	6.000.000	CCS 600K-1S CCS 1T-4S	96 96	4**		•	•	•	•			0
0,1	1500	1	15.000.000 15.000.000	CCS 1T-1U	96	4**		•	•	•	•			0
0,1	1500	1	15.000.000	CCS 1T-10	96	4**		•	•	•	•			0
0,1	1500	1	15.000.000	CCS 1T-1L	96	4**		•	•	•	•			0
	3000	1	30.000.000	CCS 3T-3L	96	4**		•	•	•	•			0
0,2   0,5	12   30	5	60.000	IFS 30K0.2DL	92	1		•	•	•	•			0
0,2	3	1	30.000	CIB 3K-4	87	1		•	•	•				•
0,2	3	1	30.000	CXB 3K0.2	88	1		•		•				•
0,2	15	2	75.000	CFS 15K0.2	90	1		•	•	•	•	•		0
0,2	15	2,5	60.000	CPB 15K0.2N	89	1		•		•	•			0
	36	2	180.000	CDS 36K0.2L	93	1		•	•		0			0
	60	2	300.000	CDS 60K0.2	93	1		•	•		0			0
	65	2	325.000	CKE 65K0.2	91	1		•	•		0		•	0
0,5   1	30   60	10	60.000	IFS 60K0.5D	92	1		•	•	•	•			0
	30   60	10	60.000	IFS 60K0.5DL	92	1		•	•	•	•			0
	6	2	30.000	CIB 6K-4	87	1		•	•	•				•
	30	5	30.000 60.000	CXB 6K0.5 CPB 30K0.5N	88 89	1		•	-	•	•			0
	30	5	60.000	CFS 30K0.5	90	1		•	•	•	•	•		0
0,5				CPB 6K1DM	89	1	0	•		•	•			0
0,5 0,5		1	60.000		٠,		-	-			_			
0,5 0,5 1   2	3   6	1	60.000		92	1	0	•						
0,5 0,5 1   2 1   2		1 1	60.000 60.000	IFS 6K-3M IFS 6K-3SM	92 92	1	0	•	•	•	•			0
0,5 0,5 1   2 1   2 1   2	3   6	1	60.000	IFS 6K-3M										
0,5 0,5 1   2 1   2 1   2 1   2	3   6 3   6 3   6	1	60.000 60.000	IFS 6K-3M IFS 6K-3SM	92	1		•	•	•	•			0
0,5 0,5 1   2 1   2 1   2 1   2 1   2 1   2	3   6 3   6 3   6 75   150	1 1 25	60.000 60.000 60.000	IFS 6K-3M IFS 6K-3SM IFS 100K-3	92 92	1		•	•	•	•			0
0,5 0,5 1   2 1   2 1   2 1   2 1   2	3   6 3   6 3   6 75   150 75   150	1 1 25 25	60.000 60.000 60.000	IFS 6K-3M IFS 6K-3SM IFS 100K-3 IFS 100K-3L	92 92 92	1 1 1		•	•	•	•			0

<sup>\*\*</sup> Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs

ullet Standard  $\, \circ \,$  Option

### **Quick-Finder Counting Scales/Counting Systems**

Readability	Weighing- capacity	Smallest part weight	Counting Resolution	Model	Page		M		<b>-√</b> + <b>③</b> ③)			
[d]	[Max]	(Normal)	Resolution			DAYS		CAL EXT	TOL	MEMORY	RS 232	DUAL BATT ACCU
g	kg	g/piece	Points	KERN		Fo	r an e	kplanat	ion on	the pic	ctos, se	e the front flap
2   5	6   15	2	75.000	IFS 10K-3M	92	1	0	•	•	•	•	0
2   5	6   15	2	75.000	IFS 10K-3LM	92	1	0	•	•	•	•	0
2   5	6   15	2,5	60.000	CPB 15K2DM	89	1	0	•		•	•	0
2   5	150   300	50	60.000	IFS 300K-3	92	1		•	•	•	•	0
2	6	2	30.000	CXB 6K2NM	88	1	0	•		•		•
2	30	10	30.000	CIB 30K-3	87	1		•	•	•		•
2	30	10	30.000	CXB 30K2	88	1		•		•		•
5   10	15   30	5	60.000	CPB 30K5DM	89	1	0	•		•	•	0
5   10	15   30	5	60.000	IFS 30K-3M	92	1	0	•	•	•	•	0
5	15	5	30.000	CXB 15K5NM	88	1	0	•		•		•
10   20	30   60	10	60.000	IFS 60K-2M	92	1	0	•	• (	•		0
10   20	30   60	10	60.000	IFS 60K-2LM	92	1	0	•	•	•	•	0
10	30	10	30.000	CXB 30K10NM	88	1	0	•		•		•
20   50	60   150	25	60.000	IFS 100K-2M	92	1	0	•	•	•	•	0
20   50	60   150	25	60.000	IFS 100K-2LM	92	1	0	•	•		•	0
20   50	60   150	25	60.000	IFS 100K-2LM	92	1	0	•	•	•	•	0

<sup>\*\*</sup> Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs



<sup>●</sup> Standard ○ Option









### Robust counting scale with large article memory, convenient operating philosophy and checkweighing display, counting resolution up to 30,000 points

#### Features

- · Innovative counting with tolerance range (Checkweighing): The counting process can be supported visually and/or audibly and this therefore makes portion division, dispensing and grading easier
- Visual signal: the colour of the display changes depending on the counting result (not enough/ok/ too much)
- Audible signal: the frequency of the audible signal changes depending on the counting result (not enough/ok/too much)
- Ideal for workshops for people with disabilities, particularly loud or quiet environments, where operators change frequently, etc.
- · Three displays for weight display, reference weight, total pieces
- · Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Programmable using numerical key pad:
- Required reference quantity
- Known reference weight

- Counting results memory: adds up all individual piece counts, result is shown in total weight and total pieces
- PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels
- · 20 direct price keys for frequently recurring reference weights and PRE-Tare values
- Memory for 50 reference weights and PRE-Tare values
- · High mobility: thanks to rechargeable battery operation, compact, lightweight construction, it is suitable for the use in several locations
- Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- · Energy management: Backlight turns off after 5 sec, can be switched off
- · Protective working cover included with delivery

#### Technical data

- Large backlit LCD displays, digit height 18 mm
- · Rechargeable battery pack integrated, as standard, operating time up to 160 h without backlight, charging time approx. 14 h
- · Dimensions weighing surface, stainless steel, W×D 315×215 mm
- Overall dimensions W×D×H, 350×330×120 mm
- · Net weight approx. 3,6 kg
- Permissible ambient temperature -10 °C/40 °C

#### Accessories

- · Protective working cover, scope of delivery 5 items, KERN RIB-A01S05
- · Internal rechargeable battery pack, operating time up to 160 h without backlight, charging time approx. 14 h, KERN GAB-A04

STANDARD



















OPTION

Model	Weighing capacity	Readability	Smallest part	Counting	Options
	[Max]	[d]	weight (Normal)	resolution	DAkkS Calibr. Certificate DAkkS
KERN	kg	g	g/piece	Points	KERN
CIB 3K-4	3	0,2	1	30.000	963-127
CIB 6K-4	6	0,5	2	30.000	963-128
CIB 10K-3	15	1	5	30.000	963-128
CIB 30K-3	30	2	10	30.000	963-128





# Entry level model into professional counting, counting resolution of 30,000 points, verification optional

#### **Features**

- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Programmable using numerical key pad:
- required reference quantity
- known reference weight
- Three displays for weight display (verifiable), reference weight, total pieces
- Fill-to-target function: Target count or target weight can be programmed. When the target weight is reached there is an audible and visual signal
- 10 memories for reference weights
- Counting results memory: adds up all individual piece counts, result is shown in total weight and total pieces

- Integrated ESD protection, which makes it ideal for weighing small plastic parts
- Energy management: Backlight turns off after
   5 sec.
- PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels
- Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- · Protective working cover included with delivery

#### Technical data

- · Large backlit LCD displays, digit height 18 mm
- Weighing plate dimensions, stainless steel, W×D 300×225 mm
- Overall dimensions W×D×H, 300×330×110 mm

- Rechargeable battery pack integrated, as standard, operating time up to 200 h without backlight, charging time approx. 8 h
- · Net weight approx. 4,0 kg
- Permissible ambient temperature -10 °C/40 °C

#### Accessories

- Protective working cover, scope of delivery 5 items, KERN CXB-A01S05
- Internal rechargeable battery pack, operating time up to 200 h without backlight, charging time approx. 8 h, KERN GAB-A04

Note: Official verification is mandatory for commercial trade

TANDARD















DAkkS +3 DAYS +3 DAYS

Model	Weighing	Readability	Verification	Minimal load	d Smallest par	t Counting		Options		
	capacity		value		weight	resolution	Verification	DAkkS Calibr. Certificate		
	[Max]	[d]	[e]	[Min]	(Normal)		MIII	DAkkS		
KERN	kg	g	g	g	g/piece	Points	KERN	KERN		
CXB 3K0.2	3	0,2	-	-	1	30.000	=	963-127		
CXB 6K0.5	6	0,5	-	-	2	30.000	-	963-128		
CXB 15K1	15	1	-	-	5	30.000	=	963-128		
CXB 30K2	30	2	-	_	10	30.000	-	963-128		

Note: For devices that require verification (conformity assessment according to NAWI 2014/31/EU), please include the verification when placing your order.

The initial verification is not possible after delivery. Please inform the full address of the location of use for the initial verification.

	THE IIIIIII VETITION	ition is not po	solbic ditter de	invery. I lease	inonin the i	un address of the	location of asc for the initial	i verinication.	
CXB 3K1NM	3	1	1	20	1	30.000	965-227	963-127	
CXB 6K2NM	6	2	2	40	2	30.000	965-228	963-128	
CXB 15K5NM	15	5	5	100	5	30.000	965-228	963-128	
CXB 30K10NM	30	10	10	200	10	30.000	965-228	963-128	





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

#### Features

- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- · Programmable using numerical key pad:
- required reference quantity
- known reference weight
- Three displays for weight display (verifiable), reference weight, total pieces
- · Counting results memory: adds up all individual piece counts, result is shown in total weight and total pieces
- Fill-to-target function: Target count or target weight can be programmed. When the target value is reached, this will be indicated by an audible signal
- · PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels

- · 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.)
- Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- · Protective working cover included with delivery

#### Technical data

- · Large backlit LCD displays, digit height 20 mm
- · Weighing plate dimensions, stainless steel, W×D 295×225 mm
- Overall dimensions W×D×H, 315×350×100 mm
- · Net weight approx. 3,2 kg
- Permissible ambient temperature 0 °C/40 °C

#### Accessories

- Protective working cover, scope of delivery: 5 items, KERN CFS-A02S05
- · Internal rechargeable battery pack, operating time up to 90 h without backlight, charging time approx. 12 h, KERN GAB-A04
- II Signal lamp for visual support of weighing with tolerance range, KERN CFS-A03
- · 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
- · Further details, plenty of further accessories and suitable printers see Accessories

Note: Official verification is mandatory for commercial trade

#### STANDARD



































Model	Weighing	Readability	Verification	Minimal	Smallest part	Counting		Options
	capacity	f.d	value	load	weight	resolution	Verification	DAkkS Calibr. Certificate
	[Max]	[d]	[e]	[Min]	(Normal)		MIII	DAkkS
KERN	kg	g	g	g	g/piece	Points	KERN	KERN
CPB 6K0.1N	6	0,1	-	-	1	60.000	-	963-128
CPB 15K0.2N	15	0,2	-	-	2,5	60.000	-	963-128
CPB 30K0.5N	30	0,5	-	-	5	60.000	-	963-128
		Multi-di	vision balance	e, with incr	easing or decre	asing load, it sw	itches automatically	
			to the next lar	gest or sm	nallest weighing	range [Max] and	d readout [d].	
CPB 6K1DM	3   6	1   2	1   2	20	1	60.000	965-228	963-128
CPB 15K2DM	6   15	2   5	2   5	40	2,5	60.000	965-228	963-128
CPB 30K5DM	15   30	5   10	5   10	100	5	60.000	965-228	963-128

Note: For devices that require verification (conformity assessment according to NAWI 2014/31/EU), please include the verification when placing your order. The initial verification is not possible after delivery. Please inform the full address of the location of use for the initial verification.







### Professional, high-resolution counting scale with 100 item memories and 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
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- · Programmable using numerical key pad:
- required reference quantity
- known reference weight
- · Three displays for weight display, reference weight, total pieces
- · Weighing with tolerance range (checkweighing): a visual and audible signal helps with portioning, dispensing or grading
- Fill-to-target function: Programmable target quantity or target weight e.g. for checkweighing. A signal will be displayed when the target value is reached
- · PRE-TARE function for manual subtraction of a known container weight, useful for checking fill-levels

- Second balance interface to construct a highresolution counting system, standard, e.g. with weighing bridges of KERN KFP V20
- · Draught shield standard for models with weighing plate size A, weighing space W×D×H 155×141×80 mm
- · Protective working cover included with delivery, for models with weighing plate size A, B

#### Technical data

- · Large backlit LCD displays, digit height 20 mm
- · Dimensions weighing surface
- A Ø 80 mm
- B W×D 295×225 mm
- C W×D 370×240 mm
- Overall dimensions W×D×H
- A 315×350×110 mm / 315×350×185 mm (incl. draught shield)
- B 315×350×100 mm
- C 370×360×100 mm
- Permissible ambient temperature 0 °C/40 °C

#### Accessories

- A, B: Protective working cover, scope of delivery: 5 items, KERN CFS-A02S05
- Internal rechargeable battery pack, operating time up to 70 h without backlight, charging time approx. 14 h, KERN GAB-A04
- Signal lamp for visual support of weighing with tolerance range, KERN CFS-A03
- 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
- Further details, plenty of further accessories and suitable printers see Accessories

#### STANDARD



































# OPTION

Model KERN	Weighing capa- city [Max] kg	Readability [d] g	Smallest part weight (Normal) g/piece	Counting resolution Points	Net weight approx. kg	Weighing plate	Options  DAkkS Calibr. Certificate  DAkkS  KERN
CFS 300-3	0,3	0,001	0,05	60.000	2,6	Α	963-127
CFS 3K-5	3	0,01	0,5	60.000	3,4	В	963-127
CFS 6K0.1	6	0,1	1	60.000	3,2	В	963-128
CFS 15K0.2	15	0,2	2	75.000	3,4	В	963-128
CFS 30K0.5	30	0,5	5	60.000	3,4	В	963-128
CFS 50K-3	50	1	10	50.000	4,4	C	963-128











#### Technical data

- Large backlit LCD display, digit height 25 mm
- Optional battery operation, 4×1.5 V AA not included in scope of delivery, operating time up to 20 h
- · Dimensions weighing surface
  - A Ø 82 mm, plastic
  - B W×D 130×130 mm, stainless steel
- W×D 340×240 mm, stainless steel
- Overall dimensions W×D×H
- A 163×245×65 mm / 163×245×123 mm (incl. draught shield)
- B 163×245×65 mm
- C 350×390×120 mm
- Permissible ambient temperature -10 °C/40 °C

### Easy to use, self-explanatory counting scale with laboratory accuracy, ideal for the various possibilities of Industry 4.0 applications, counting resolution up to 360.000 points

#### **Features**

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

- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- KERN Universal Port (KUP): permits the connection of an external KUP interface adapter, such as, for example, RS-232, USB, Bluetooth, WiFi or Ethernet, for the exchange of data and control commands, without any installation outlay
- · KERN Communication Protocol (KCP): The KCP permits searching and remote control of the balance using external control devices or computers
- · Two balances in one: Changes from counting mode to weighing mode at the touch of a key
- Ring-shaped draught shield standard, only for models with weighing plate size A, weighing space Ø×H 90×40 mm
- Protective working cover included with delivery

#### Accessories

- A, B Protective working cover, scope of delivery: 5 items, KERN YBA-A12S05
- © Protective working cover, scope of delivery 5 items, KERN FKB-A02S05
- · Internal rechargeable battery pack, operating time up to 48 h without backlight, charging time approx. 8 h, KERN YKR-01
- · External data interface RS-232, interface cable included, KERN KUP-01
- · External data interface USB, interface cable included, KERN KUP-03
- · External data interface WiFi, interface cable included, KERN KUP-05
- · Extension box for connecting up to three interfaces in parallel, KERN KUP-13
- · Further details, plenty of further accessories and suitable printers see Accessories

#### STANDARD











































Model	Weighing capacity	Readability	Smallest part weight	Counting resolution	Net weight	Weighing plate	Options  DAkkS Calibr. Certificate
KERN	[Max] kg	[d] g	(Normal) g/piece	Points	approx. kg		<b>DAkkS</b> KERN
CKE 360-3	0,36	0,001	0,02	180.000	0,85	А	963-127
CKE 3600-2	3,6	0,01	0,2	180.000	1,6	В	963-127
CKE 6K0.02	6	0,02	0,2	300.000	7	C	963-128
CKE 8K0.05	8	0,05	0,5	160.000	7	C	963-128
CKE 16K0.05	16	0,05	0,5	320.000	7	C	963-128
CKE 16K0.1	16	0,1	1	160.000	7	C	963-128
CKE 36K0.1	36	0,1	1	360.000	7	C	963-128
CKE 65K0.2	65	0,2	2	325.000	7	C	963-129



### Industrial counting scale with convenient decimal keypad for easy data entry - counting resolution up to 75.000 points, verification optional

#### **Features**

- · Ergonomic display device with large keypad and high-contrast display for easy entry and reading of, e.g., tare weights, reference weights, limit values etc.
- Three displays for weight display (verifiable), reference weight, total pieces
- · 100 item memories for master data such as reference weight, reference quantity, container weight (PRE-TARE) etc.
- · Precise counting: The manual reference weight optimisation gradually improves the average

value of the piece weight

- Totalising of pieces when counting
- · Printout with date and time
- · Protective working cover over the display device included with the delivery

#### Technical data

- · Large backlit LCD displays, digit height 16,5 mm
- Weighing plate dimensions, stainless steel, W×D×H A 230×230×110 mm B 300×240×110 mm









- © 400×300×120 mm **D** 500×400×140 mm
- E 650×500×140 mm
- Dimensions of display device W×D×H 260×150×65 mm
- Cable length of display device approx. 3 m
- Permissible ambient temperature -10 °C/40 °C

#### Accessories

- Protective working cover over the display device, scope of delivery: 5 items, KERN KFB-A02S05
- Stand to elevate display device
- 1 A E Height of stand approx. 330 mm, KERN IFB-A01
- D, E Height of stand approx. 600 mm, KERN IFB-A02
- · Internal rechargeable battery pack, operating time up to 18 h without backlight, charging time approx. 12 h, must be ordered at purchase,
- 2 ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- Further details, plenty of further accessories and suitable printers see Accessories

# 

























Model	Weighing	Readability	Verification	Minimal load	Smallest part	Net	Weighing		Options
	capacity		value	[Min]	weight	weight	plate	Verification	DAkkS Calibr. Certificate
	[Max]	[d]	[e]	g	(Normal)	approx		MIII	DAkkS
KERN	kg	g	g		g/piece	kg		KERN	KERN
	Multi-ra	ange balance,	with increasing	g load it switche	s automatically	to the r	ext largest we	eighing range [Max] and rea	idout [d]
			and when the	load is fully rem	oved, the balan	ice switc	hes back to th	ie lower range	
IFS 6K-4S	3   6	0,1   0,2	_	-	1	3,8	Α	-	963-128
IFS 10K-4	6   15	0,1   0,2	-	-	2	4,8	В	-	963-128
IFS 30K0.2DL	12   30	0,2   0,5	-	-	5	7	C	-	963-128
IFS 60K0.5D	30   60	0,5   1	-	-	10	7	C	-	963-129
IFS 60K0.5DL	30   60	0,5   1	-	-	10	12	D	-	963-129
IFS 100K-3	75   150	1   2	-	-	25	12	D	-	963-129
IFS 100K-3L	75   150	1   2	-	-	25	20	E	-	963-129
IFS 300K-3	150   300	2   5	-	-	50	22	E	-	963-129
Note: For d	evices that re	equire verifica	tion (conformit	ty assessment a	ccording to NA	WI 2014	/31/EU), plea	ase include the verification	when placing your order.
	The initial	verification is	not possible a	fter delivery. Pl	ease inform the	full add	ress of the loc	ation of use for the initial v	erification.
IFS 6K-3SM	3   6	1   2	1   2	20   40	1	3,8	Α	965-228	963-128
IFS 6K-3M	3   6	1   2	1   2	20   40	1	5,0	В	965-228	963-128

IFS 6K-3SM	3   6	1   2	1   2	20   40	1	3,8	Α	965-228	963-128	
IFS 6K-3M	3   6	1   2	1   2	20   40	1	5,0	В	965-228	963-128	
IFS 10K-3M	6   15	2   5	2   5	40   100	2	4,8	В	965-228	963-128	
IFS 10K-3LM	6   15	2   5	2   5	40   100	2	7	C	965-228	963-128	
IFS 30K-3M	15   30	5   10	5   10	100   200	5	7	C	965-228	963-128	
IFS 60K-2M	30   60	10   20	10   20	200   400	10	7	C	965-229	963-129	
IFS 60K-2LM	30   60	10   20	10   20	200   400	10	13	D	965-229	963-129	
IFS 100K-2M	60   150	20   50	20   50	400   1000	25	12	D	965-229	963-129	
IFS 100K-2LM	60   150	20   50	20   50	400   1000	25	22	E	965-229	963-129	















### Easy to use industrial counting scale for heavy loads, counting resolution up to 300,000 points, ideal for the diverse possibilities of Industry 4.0 applications

#### **Features**

- · Self-explanatory, graphic control panel, the workings steps can be understood immediately, even without operating instructions
- no learning time = reduces costs
- ideal for untrained users
- visualised process avoids operating errors
- · The 4 steps are carried out from left to right:
- 1 Place the empty container onto the weighing plate and tare by pressing the TARE key
- 2 Place the reference quantity for the goods to be counted into the container (5, 10 or 20 pieces)
- 3 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 in the display
- · Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- · KERN Universal Port (KUP): permits the connection of an external KUP interface adapter, such as, for example, RS-232, USB, Bluetooth, WiFi or

Ethernet, for the exchange of data and control commands, without any installation outlay

- KERN Communication Protocol (KCP): The KCP permits searching and remote control of the balance using external control devices or computers
- · Standardised, simplified concept of operation
- · Protective working cover over the display device included with the delivery

#### Technical data

- · Backlit LCD display, digit height 21 mm
- Weighing plate dimensions, stainless steel
  - A W×D×H 230×230×103 mm
  - B W×D×H 308×318×75 mm, see larger picture
  - C W×D×H 500×400×125 mm
- · Dimensions of display device W×D×H 225×115×60 mm
- Permissible ambient temperature -10 °C/40 °C

#### Accessories

- Protective working cover over the display device, scope of delivery: 5 items, KERN DE-A12S05
- Internal rechargeable battery pack, operating time up to 48 h without backlight, charging time approx. 8 h, KERN YKR-01
- Mount to fasten the display device to the platform, for models with weighing plate size
- B, C, KERN DE-A11N
- 5 Stand to elevate display device Models with weighing plate size **B**: Height of stand approx. 480 mm, KERN DE-A10 Models with weighing plate size C: Height of stand approx. 600 mm, KERN DS-A03
- 6 Set for underfloor weighing, consists of platform, bow, hook, only for models with weighing plate B, KERN DS-A01
- · External data interface RS-232, interface cable included, KERN KUP-01
- External data interface USB, interface cable included, KERN KUP-03
- · External data interface Ethernet, KERN KUP-04
- External data interface WiFi, interface cable included, KERN KUP-05
- · Bluetooth interface adapter, KERN KUP-06
- · Extension box for connecting up to three interfaces in parallel, KERN KUP-13
- · Further details, plenty of further accessories and suitable printers see Accessories

STANDARD

























OPTION

















Model	Weighing capacity	Readability	Smallest part weight	Counting resolution	Net weight	Cable length	Weighing plate	Options <b>DAkkS Calibr. Certificate</b>
	[Max]	[d]	(Normal)		approx.	approx.		DAkkS
KERN	kg	g	g/piece	Points	kg	m		KERN
CDS 4K0.02	4	0,02	0,2	200.000	8	2	Α	963-127
CDS 15K0.05	15	0,05	0,5	300.000	8	2	В	963-128
CDS 16K0.1	16	0,1	1	160.000	8	2	В	963-128
CDS 30K0.1	30	0,1	1	300.000	8	2	В	963-128
CDS 30K0.1L	30	0,1	1	300.000	19	0,6	C	963-128
CDS 36K0.2L	36	0,2	2	180.000	19	0,6	C	963-128
CDS 60K0.2	60	0,2	2	300.000	19	0,6	C	963-129





# High-resolution counting system to count the smallest parts in large quantities, maximum number of parts which can be displayed is 999,999, verification optional

#### **Features**

- The highly accurate KERN CCA counting system can replace a whole range of individual balances, efficiently and at a reasonable price
- Thanks to optional verification, it is also suitable for use in verified applications
- The balances are connected to one another with an RS-232 Y-cable, which also allows you to connect a printer

#### Reference scale KERN EWJ

- This precision balance, which can be used as an individual balance, also fulfils the highest demands through connection with a high-capacity platform
- Automatic internal adjustment, time-controlled every 2 h, guarantees high degree of accuracy and makes the balance independent of its location
- Draught shield standard for models with [Max] = 600 g, weighing space W×D×H 134×128×80 mm
- · Protective working cover included with delivery

#### Quantity scale KERN IFS

- The high-accuracy quantity counting takes place on the weighing platform IFS. In this way even the smallest of parts can be counted in large volumes
- Tough industry standard suitable for use in harsh industrial applications
- Ergonomic display device with large keypad and high-contrast LCD display for easy entry and reading of, e.g., tare weights, reference weights, limit values etc.
- Three displays for weight display, reference weight, total pieces
- 100 item memories for master data such as reference weight, reference quantity, container weight (PRE-TARE) etc.
- Precise counting: The manual reference weight optimisation gradually improves the average value of the piece weight
- Totalising of pieces when counting
- · Printout with date and time
- Aluminium singlepoint load cell (1×3000 e), protection against dust and water splashes IP65
- Protective working cover over the display device included with the delivery







Note: Official verification is mandatory for commercial trade

#### Technical data

#### Reference scale KERN EWJ

- Dimensions weighing surface, stainless steel [Max] 600 g: Ø 120 mm
  - **11** [Max] 6000 g: W×D 155×145 mm
- Overall dimensions W×D×H [Max] 600 g: 220×340×180 mm (incl. draught shield) [Max] 6000 g: 215×340×105 mm
- Net weight [Max] 600 g: approx. 3,2 kg [Max] 6000 g: approx. 3,4 kg

#### **Quantity scale KERN IFS**

- · Weighing plate dimensions, stainless steel
  - A W×D×H 300×240×105 mm
  - **B** W×D×H 400×300×114 mm
  - C W×D×H 500×400×140 mm
- · Cable length of display device approx. 3 m

#### Counting System KERN CCA

- · Connection cable approx. 1,5 m
- · Net weight
- A approx. 9 kg
- B approx. 14 kg
- C approx. 16 kg

#### Accessories

#### Reference scale KERN EWJ

- · Protective working cover, scope of delivery 5 items, KERN EWJ-A04S05
- · Internal rechargeable battery pack, operating time up to 20 h without backlight, charging time approx. 12 h, KERN KFB-A01

#### Quantity scale KERN IFS

- Protective working cover over the display device, scope of delivery: 5 items, KERN KFB-A02S05
- · Internal rechargeable battery pack, operating time up to 18 h without backlight, charging time approx. 12 h, KERN KFB-A01
- Stand to elevate display device Height of stand approx. 330 mm, KERN IFB-A01

For models with weighing plate size A, B: Height of stand approx. 600 mm, KERN IFB-A02

- 3 ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- Further details, plenty of further accessories and suitable printers see Accessories

STANDARD



























OPTION DAkks 888 ACCU +3 DAYS FACTORY ... ACCU

Model		Quantity scale		Referen	ice scale	Smallest	(	Options
	Weighing capacity	Readability [d]	Weighing	Weighing capacity	Readability [d]	part weight (Normal)	Verification	DAkkS Calibr. Cert.
KERN	[Max] kg	g	plate	[Max] g	g	g/piece	M KERN	<b>DAkkS</b> KERN
Note:	: For devices that red	quire verification	(conformity as	ssessment acco	ording to NAWI	2014/31/EU), p	ease include the verification wh	en placing your order.

			•		•		ocation of use for the initial ve	. 0,
CCA 6K-5M	3   6	1   2	Α	600	0,01	0,2	965-228-216	962-128-127
CCA 6K-4M	3   6	1   2	Α	6000	0,1	1	965-229-216	962-129-127
CCA 10K-5M	6   15	2   5	Α	600	0,01	0,2	965-228-216	962-128-127
CCA 30K-5M	15   30	5   10	В	600	0,01	0,2	965-228-216	962-128-127
CCA 30K-4M	15   30	5   10	В	6000	0,1	1	965-229-216	962-129-127
CCA 60K-5M	30   60	10   20	В	600	0,01	0,2	965-229-216	962-129-127
CCA 60K-4M	30   60	10   20	В	6000	0,1	1	965-229-216	962-129-127
CCA 100K-5M	60   150	20   50	C	600	0,01	0,2	965-229-216	962-129-127
CCA 100K-4M	60   150	20   50	C	6000	0,1	1	965-229-216	962-129-127





# Counting system to count the smallest parts in large quantities, maximum number of parts which can be displayed is 999,999

#### **Features**

 The highly accurate KERN CCS counting system can replace a whole range of individual balances, efficiently and at a reasonable price

#### Reference scale KERN CFS

- This professional counting scale, which can also be used as a stand-alone scale, meets the highest demands for accuracy, weighing capacity and volume of items, by being connected to a highcapacity weighing bridge
- Programmable using numerical key pad:
- required reference quantity
- known reference weight
- Three displays for weight display, reference weight, total pieces
- Memory (PLU) for 100 items with additional text, reference weight and tare weight,
   e.g. of a container

- Fill-to-target function: Target count or target weight can be programmed. When the target weight is reached there is an audible and visual signal
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value
- Draught shield standard for models with [d] = 0,001 g, weighing space W×D×H 155×141×80 mm
- · Protective working cover included with delivery

#### Quantity scale

#### KERN KFP / KERN KFU / KERN KIP

 The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge).
 In this way even the smallest of parts can be counted in large volumes

#### Platform KERN KFP-V20 IP65

- Weighing plate stainless steel, painted steel base
- Aluminium singlepoint load cell, protection against dust and water splashes
- For models with weighing plate size A E

#### Weighing bridge KERN KIP-V20M IP67

- Lacquered steel weighing bridge, corrugated steel plate. Extremely resistant to bending due to material thickness
- 4 load cells, alloy steel, silicone-coated, IP67
- For models with weighing plate size **F**, **G**, **H**

#### Weighing bridge KERN KFP-V20 IP67

- Weighing bridge painted steel, Weighing plate screwed on from the top
- 4 load cells, alloy steel, silicone-coated, IP67
- For models with weighing plate size lacksquare

#### U-shaped weighing bridge KERN KFU-V20

- Load range: painted steel
- 4 load cells, alloy steel, silicone-coated, IP67
- For models with weighing plate size **J**













#### Technical data

#### Reference scale KERN CFS

- Weighing plate dimensions, stainless steel [d] = 0,001 g:  $\emptyset$  80 mm [d]  $\ge$  0,01 g: W×D 295×225 mm
- Overall dimensions W×D×H 315×350×100 mm
- Net weight
   [d] = 0,001 g: approx. 2,6 kg
   [d] ≥ 0,01 g: approx. 3,4 kg

#### Quantity platforms, KERN KFP-V20 IP65

- Weighing plate dimensions, stainless steel
  - A W×D×H 230×230×103 mm
  - **B** W×D×H 300×240×105 mm
- C W×D×H 400×300×114 mm
- **D** W×D×H 500×400×124 mm
- **E** W×D×H 650×500×136 mm

#### Quantity platforms, KERN KIP-V20M

- Weighing plate dimensions, coated metal
- **I** W×D×H 1000×1000×108 mm
- **G** W×D×H 1200×1500×108 mm
- **H** W×D×H 1500×1500×108 mm

#### Bulk weighing bridges, KERN KFP-V20 IP67

- Weighing plate dimensions, coated metal
  - W×D×H 1500×1250×80 mm

#### Bulk pallet load handling, KERN KFU-V20

Weighing plate dimensions, coated metal
 W×D×H 840×1190×90 mm

#### Connection cable approx.

A - E 2,5 m

**F** - **J** 5 m

#### Accessories

- Protective working cover, scope of delivery:
   5 items, KERN CFS-A02S05
- Suitable for models with weighing plate size
  ■■: ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- Internal rechargeable battery pack, operating time up to 70 h without backlight, charging time approx. 14 h, KERN GAB-A04
- Signal lamp for visual support of weighing with tolerance range, KERN CFS-A03
- 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
- Further details, plenty of further accessories and suitable printers see Accessories

# /------



Model	4	Quantity scale		Referer	ice scale	Counting	Smallest	Options
	Weighing	Readability	Weighing	Weighing	Readability	resolution	partweight	DAkkS Calibr. Certificate
KERN	capacity [Max] kg	[d]	plate	capacity [Max] g	[d]	Points	(Normal) g/piece	DAkkS
KLKIN	[IVIAX] Kg	g		[IVIAX] g	g	TOITES	g/ piece	KERN
CCS 6K-6	6	0,2	A	300	0,001	1.200.000	0,05	962-128-127
CCS 10K-6	15	0,5	В	300	0,001	3.000.000	0,05	962-128-127
CCS 30K0.01.	30	1	C	3000	0,01	600.000	0,5	962-128-127
CCS 30K0.1.	30	1	C	6000	0,1	300.000	1	962-128-128
CCS 60K0.01.	60	2	C	3000	0,01	1.200.000	0,5	962-129-127
CCS 60K0.01L.	60	2	D	3000	0,01	1.200.000	0,5	962-129-127
CCS 60K0.1.	60	2	C	6000	0,1	600.000	1	962-129-128
CCS 60K0.1L.	60	2	D	6000	0,1	600.000	1	962-129-128
CCS 150K0.01	150	5	D	3000	0,01	3.000.000	0,5	962-129-127
CCS 150K0.01L	150	5	E	3000	0,01	3.000.000	0,5	962-129-127
CCS 150K0.1.	150	5	D	6000	0,1	1.500.000	1	962-129-128
CCS 150K0.1L	150	5	E	6000	0,1	1.500.000	1	962-129-128
CCS 300K0.1	300	10	E	6000	0,1	3.000.000	1	962-129-128
CCS 300K0.01	300	10	E	3000	0,01	6.000.000	0,5	962-129-127
CCS 600K-1S	600	200	F	6000	0,1	6.000.000	1	962-130-127
CCS 1T-4S	1500	500	F	6000	0,1	15.000.000	1	962-130-128
CCS 1T-4	1500	500	G	6000	0,1	15.000.000	1	962-130-128
CCS 1T-1L	1500	500	Н	6000	0,1	15.000.000	1	962-130-128
CCS 1T-1U	1500	500	J	6000	0,1	15.000.000	1	962-130-128
CCS 3T-3L	3000	1000	0	6000	0,1	30.000.000	1	962-132-128

■ \* ONLY WHILE STOCKS LAST

# VERSATILE **PRODUCTS**

You will always find the right model for your application in our wide range of platform scales.

KERN platform scales - as versatile as your areas

- Entry-level models portable, economical and well-made - for weighing post and packages
- · High-quality models with high IP rating or with EC type approval for commercial trade
- · Top models perfect in your workflow with KERN EasyTouch software, as a user-friendly solution for complex recipe weighing or checkweighing applications with relay control and much more



#### True allrounders - suitable for entry-level users and industrial professionals

In order to fulfil the diverse requirements of our industrial customers, KERN platform scales have a large number of practical features, such as, for example, counting and recipe functions, data interfaces (RS 232, RS 485, USB, Bluetooth, WLAN, Ethernet), options for integration into networks, PC or printer connections, rechargeable battery/ battery operation for mobile use and much more. KERN platform scales - just true allrounders!

Note: The "Hold function" is particularly useful for industrial weighing and guarantees stable weights even when the location is unstable or when weighing animals.



#### The unbeatable benefits of platform scales:

- Weighing range from 3 kg 600 kg
- · Robust platform construction for the harshest industrial use
- · Versatile, available with column
- High degree of overload protection
- · Stainless steel weighing plate, shock proof and easy to clean
- · Large selection of platform sizes
- Display device can be positioned separately, e.g. wall-mounted, on a column or next to the platform. Clear view for the user of the display even with bulky items on the scale.

#### → Top tip:

If you can't find what you are looking for in our standard range, then we can offer you our CUSOS service: Perfect weighing solutions with personalised platform sizes, specific software solutions and adapted peripheral devices.

For further information on this, see page 146/147





selection of platform scales and practical accessories, such as, for example, columns, scanners etc. in Accessories or on the internet.



(PC or laptop), which has the KERN EasyTouch software installed, you have the highest level of flexibility: Weighing at the location of installation and readout from up to 20 m away thanks to Bluetooth or WiFi.