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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 [d] g	Weighing capacity [Max] kg	Smallest part weight (Normal) g/piece	Counting resolution Points	Model KERN	Page	M CAL EXT	CAL EXT	TOL	MEMORY	RS 232	DUAL	BATT	ACCU
0,001	0,3	0,05	60.000	CFS 300-3	86		●	●	●	●			○
0,001	0,36	0,02	180.000	CKE 360-3	87		●	●	○	●		●	○
0,001	6	0,05	1.200.000	CCS 6K-6	92		●	●	●	●			○
0,001	15	0,05	3.000.000	CCS 10K-6	92		●	●	●	●			○
0,01	3 | 6	0,2	300.000	CCA 6K-5M	90	○	●	●	●	●			○
0,01	3	0,5	60.000	CFS 3K-5	86		●	●	●	●	●		○
0,01	3,6	0,2	180.000	CKE 3600-2	87		●	●	○	●		●	○
0,01	6 | 15	0,2	750.000	CCA 10K-5M	90	○	●	●	●	●			○
0,01	15 | 30	0,2	1.500.000	CCA 30K-5M	90	○	●	●	●	●			○
0,01	30 | 60	0,2	3.000.000	CCA 60K-5M	90	○	●	●	●	●			○
0,01	30	0,5	600.000	CCS 30K0.01.	92		●	●	●	●			○
0,01	60 | 150	0,2	7.500.000	CCA 100K-5M	90	○	●	●	●	●			○
0,01	60	0,5	1.200.000	CCS 60K0.01.	92		●	●	●	●			○
0,01	60	0,5	1.200.000	CCS 60K0.01L.	92		●	●	●	●			○
0,01	150	0,5	3.000.000	CCS 150K0.01L	92		●	●	●	●			○
0,01	150	0,5	3.000.000	CCS 150K0.01	92		●	●	●	●			○
0,01	300	0,5	6.000.000	CCS 300K0.01	92		●	●	●	●			○
0,02	4	0,2	200.000	CDS 4K0.02	89		●	●	○				○
0,02	6	0,2	300.000	CKE 6K0.02	87		●	●	○			●	○
0,05	8	0,5	160.000	CKE 8K0.05	87		●	●	○			●	○
0,05	15	0,5	300.000	CDS 15K0.05	89		●	●	○				○
0,05	16	0,5	320.000	CKE 16K0.05	87		●	●	○			●	○
0,1 | 0,2	3 | 6	1	60.000	IFS 6K-4S	88		●	●	●	●			○
0,1 | 0,2	6 | 15	2	75.000	IFS 10K-4	88		●	●	●	●			○
0,1	3 | 6	1	60.000	CCA 6K-4M	90	○	●	●	●	●			○
0,1	6 | 15	1	150.000	CCA 10K-4M	90	○	●	●	●	●			○
0,1	6	1	60.000	CPB 6K0.1N	85		●	●		●	●		○
0,1	6	1	60.000	CFS 6K0.1	86		●	●	●	●	●		○
0,1	15 | 30	1	300.000	CCA 30K-4M	90	○	●	●	●	●			○
0,1	16	1	160.000	CKE 16K0.1	87		●	●	○			●	○
0,1	16	1	160.000	CDS 16K0.1	89		●	●	○				○
0,1	30 | 60	1	600.000	CCA 60K-4M	90	○	●	●	●	●			○
0,1	30	1	300.000	CDS 30K0.1L	89		●	●	○				○
0,1	30	1	300.000	CCS 30K0.1.	92		●	●	●	●			○
0,1	30	1	300.000	CDS 30K0.1	89		●	●	○				○
0,1	36	1	360.000	CKE 36K0.1	87		●	●	○			●	○
0,1	60 | 150	1	1.500.000	CCA 100K-4M	90	○	●	●	●	●			○
0,1	60	1	600.000	CCS 60K0.1.	92		●	●	●	●			○
0,1	60	1	600.000	CCS 60K0.1L.	92		●	●	●	●			○
0,1	150	1	1.500.000	CCS 150K0.1L	92		●	●	●	●			○
0,1	150	1	1.500.000	CCS 150K0.1.	92		●	●	●	●			○
0,1	300	1	3.000.000	CCS 300K0.1	92		●	●	●	●			○
0,1	600	1	6.000.000	CCS 600K-1S	92		●	●	●	●			○
0,1	1500	1	15.000.000	CCS 1T-4S	92		●	●	●	●			○
0,1	1500	1	15.000.000	CCS 1T-1U	92		●	●	●	●			○
0,1	1500	1	15.000.000	CCS 1T-4	92		●	●	●	●			○
0,1	1500	1	15.000.000	CCS 1T-1L	92		●	●	●	●			○
0,1	3000	1	30.000.000	CCS 3T-3L	92		●	●	●	●			○
0,2 | 0,5	12 | 30	5	60.000	IFS 30K0.2DL	88		●	●	●	●			○
0,2	3	1	30.000	CIB 3K-4	83		●	●	●				●
0,2	3	1	30.000	CXB 3K0.2	84		●	●	●				●
0,2	15	2	75.000	CFS 15K0.2	86		●	●	●	●	●		○
0,2	15	2,5	60.000	CPB 15K0.2N	85		●	●		●	●		○
0,2	36	2	180.000	CDS 36K0.2L	89		●	●	○				○
0,2	60	2	300.000	CDS 60K0.2	89		●	●	○				○
0,2	65	2	325.000	CKE 65K0.2	87		●	●	○			●	○
0,5 | 1	30 | 60	10	60.000	IFS 60K0.5D	88		●	●	●	●			○
0,5 | 1	30 | 60	10	60.000	IFS 60K0.5DL	88		●	●	●	●			○
0,5	6	2	30.000	CIB 6K-4	83		●	●	●				●
0,5	6	2	30.000	CXB 6K0.5	84		●		●				●
0,5	30	5	60.000	CPB 30K0.5N	85		●			●	●		○
0,5	30	5	60.000	CFS 30K0.5	86		●	●	●	●	●		○
1 | 2	3	1	60.000	CPB 6K1DM	85	○	●	●		●	●		○
1 | 2	3	1	60.000	IFS 6K-3M	88	○	●	●	●	●			○
1 | 2	3	1	60.000	IFS 6K-3SM	88	○	●	●	●	●			○
1 | 2	75 | 150	25	60.000	IFS 100K-3L	88		●	●	●	●			○
1 | 2	75 | 150	25	60.000	IFS 100K-3	88		●	●	●	●			○
1	3	1	30.000	CXB 3K1NM	84	○	●		●				●
1	15	5	30.000	CIB 10K-3	83		●	●	●				●
1	15	5	30.000	CXB 15K1	84		●		●				●
1	50	10	50.000	CFS 50K-3	86		●	●	●	●	●		○

● Standard ○ Option

For an explanation on the pictos, see the front flap

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Quick-Finder Counting Scales/Counting Systems

Readability [d] g	Weighing capacity [Max] kg	Smallest part weight (Normal) g/piece	Counting resolution Points	Model KERN	Page	CAL EXT	TOL	MEMORY	RS 232	DUAL	BATT	ACCU
2 | 5	6 | 15	2	75.000	IFS 10K-3M	88	○	●	●	●	●		○
2 | 5	6 | 15	2	75.000	IFS 10K-3LM	88	○	●	●	●	●		○
2 | 5	6 | 15	2,5	60.000	CPB 15K2DM	85	○	●		●	●		○
2 | 5	150 | 300	50	60.000	IFS 300K-3	88		●	●	●	●		○
2	6	2	30.000	CXB 6K2NM	84	○	●		●			●
2	30	10	30.000	CIB 30K-3	83		●	●	●			●
2	30	10	30.000	CXB 30K2	84		●		●			●
5 | 10	15 | 30	5	60.000	CPB 30K5DM	85	○	●		●	●		○
5 | 10	15 | 30	5	60.000	IFS 30K-3M	88	○	●	●	●	●		○
5	15	5	30.000	CXB 15K5NM	84	○	●		●			●
10 | 20	30 | 60	10	60.000	IFS 60K-2M	88	○	●	●	●	●		○
10 | 20	30 | 60	10	60.000	IFS 60K-2LM	88	○	●	●	●	●		○
10	30	10	30.000	CXB 30K10NM	84	○	●		●			●
20 | 50	60 | 150	25	60.000	IFS 100K-2M	88	○	●	●	●	●		○
20 | 50	60 | 150	25	60.000	IFS 100K-2LM	88	○	●	●	●	●		○

For an explanation on the pictos, see the front flap

● Standard ○ Option

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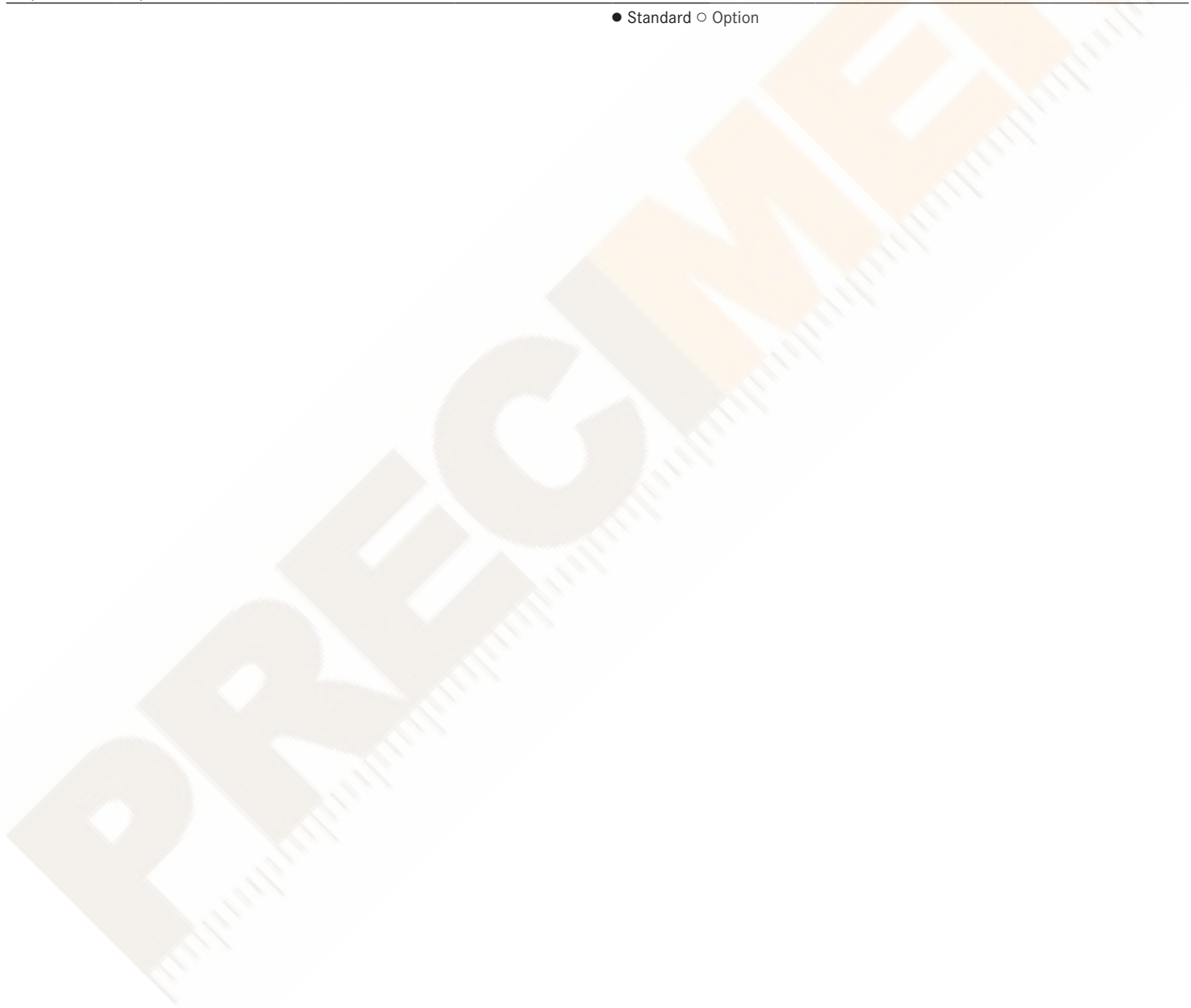
Robust counting scale with large article memory, convenient operating philosophy and checkweighing display, counting resolution up to 30,000 points

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
- 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
- Thanks to rechargeable battery operation, compact, lightweight construction, it is suitable for the use in several locations
- 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
- Dimensions weighing surface, stainless steel, W×D 315×215 mm
- Overall dimensions W×D×H 350×330×120 mm
- Rechargeable battery pack integrated, as standard, operating time up to 160 h without backlight, charging time approx. 14 h
- Net weight approx. 4,0 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 | CAL EXT | MEMORY | PCS | SUM | TOL | ACCU | MULTI | DMS | 1 DAY   **OPTION** | DAkkS +3 DAYS

Model	Weighing capacity	Readability	Smallest part weight (Normal)	Counting resolution	Options
					DAkkS Calibr. Certificate
	[Max]	[d]			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

- 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
- 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
- Dimensions weighing surface, 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

STANDARD								OPTION	FACTORY
CAL EXT	MEMORY	PCS	SUM	ACCU	230 V	DMS	1 DAY	DAkkS +3 DAYS	M +3 DAYS CXB-NM

Model KERN	Weighing capacity [Max] kg	Readability [d] g	Verification value [e] g	Minimal load [Min] g	Smallest part weight (Normal) g/piece	Counting resolution Points	Options	
							Verification M KERN	DAkkS Calibr. Certificate DAkkS 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.

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, counting resolution 60,000 points, verification optional

Features

- 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

- Thanks to rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations
- 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
- Dimensions weighing surface, 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
- **1** 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									OPTION		FACTORY
CAL EXT	MEMORY	RS 232	KCP PROTOCOL	PCS	SUM	TOL	MULTI	DMS	1 DAY	ACCU	DAkkS +3 DAYS	M +3 DAYS CPB-DM

Model	Weighing capacity	Readability	Verification value	Minimal load	Smallest part weight (Normal)	Counting resolution	Options Verification	DAkkS Calibr. Certificate
	[Max]	[d]	[e]	[Min]			M⃞⃞	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-division balance, with increasing or decreasing load, it switches automatically to the next largest or smallest weighing range [Max] and 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
- 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: 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 high-resolution 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, see larger picture
  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

| CAL EXT | MEMORY | RS 232 | DUAL | KCP PROTOCOL | GLP PRINTER | PCS | SUM | TOL | MULTI | DMS | 1 DAY | | ACCU | DAkkS +3 DAYS |

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

NEXT LEVEL
Easy Touch
FUNCTIONS

IoT ready

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 ∅ 82 mm, plastic
  B W×D 130×130 mm, plastic, see larger picture
  C 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

Accessories

- **A**, **B** Protective working cover, scope of delivery 5 items, KERN YBA-A12S05
- **C** 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
- WiFi interface adapter, 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*

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
  - 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

- 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
- 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 ∅×H 90×40 mm
- Protective working cover included with delivery

STANDARD

| CAL EXT | KUP | KCP PROTOCOL | GLP PRINTER | PCS | TOL | UNDER | BATT | B MULTI | DMS | 1 DAY |

OPTION

| ET | RS 232 | USB | BT 4.0 | WIFI | LAN | ACCU | DAkkS +3 DAYS |

Model KERN	Weighing capacity [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
CKE 360-3	0,36	0,001	0,02	180.000	0,85	A	963-127
CKE 3600-2	3,6	0,01	0,2	180.000	1,6	B	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

9

- 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, KERN KFB-A01
- **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*

Industrial counting scale with convenient decimal keypad and high counting resolution, verification optional

Features

- 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 (verifiable), reference weight, total pieces
- 100 item memories for master data such as reference weight, reference quantity, container weight (PRE-TARE) etc.
- 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 platform dimensions W×D×H, stainless steel
  A 230×230×110 mm B 300×240×110 mm
  C 400×300×120 mm D 500×400×120 mm
  E 650×500×140 mm

STANDARD									OPTION	FACTORY	
CAL EXT	MEMORY	RS 232	KCP PROTOCOL	GLP INTERN	PCS	SUM	TOL	MULTI	DMS	1 DAY	DAkkS +3 DAYS	ACCU	M +3 DAYS IFS-M

Model KERN	Weighing capacity [Max] kg	Readability [d] g	Verification value [e] g	Minimal load [Min] g	Smallest part weight (Normal) g/piece	Net weight approx. kg	Weighing plate	Verification M□ KERN	DAkkS Calibr. Certificate DAkkS KERN
Multi-division balance, with increasing or decreasing load, it switches automatically to the next largest or smallest weighing range [Max] and readout [d]. (Remaining stock contains multi-range scales)									
IFS 6K-4S	3 | 6	0,1 | 0,2	-	-	1	3,8	A	-	963-128
IFS 10K-4	6 | 15	0,1 | 0,2	-	-	2	6	B	-	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 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.									
IFS 6K-3SM	3 | 6	1 | 2	1 | 2	20 | 40	1	3,8	A	965-228	963-128
IFS 6K-3M	3 | 6	1 | 2	1 | 2	20 | 40	1	5,0	B	965-228	963-128
IFS 10K-3M	6 | 15	2 | 5	2 | 5	40 | 100	2	4,8	B	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
  - 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
- 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
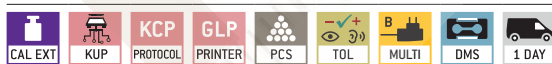- Protective working cover over the display device included with the delivery

Technical data

- Backlit LCD display, digit height 21 mm
- Weighing platform 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
- Suitable for models with weighing plate size **B**: Mount to fasten the display device to the platform, KERN DE-A11N
- **5** Stand to elevate display device **B**: Height of stand approx. 480 mm, KERN DE-A10 **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
- Ethernet interface adapter, KERN KUP-04
- WiFi interface adapter, 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: CAL EXT | KUP | KCP PROTOCOL | GLP PRINTER | PCS | TOL | B MULTI | DMS | 1 DAY

OPTION: ET | RS 232 | USB | BT 4.0 | WIFI | LAN | UNDER (B) | ACCU | DAkkS +3 DAYS

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

PREMIUM
★★★

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
- 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.
- 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

Counting System KERN CCA

Technical data

Reference scale KERN EWJ
- Dimensions weighing surface, stainless steel
  [Max] 600 g: Ø 120 mm
  1 [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: 220×340×105 mm
- Net weight
  [Max] 600 g: approx. 3,2 kg
  [Max] 6000 g: approx. 3,4 kg

Quantity scale KERN IFS
- Weighing platform 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
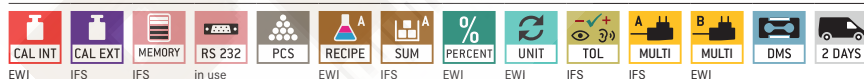 **C** approx. 16 kg

Accessories

Reference scale KERN EWJ
- Protective working cover, scope of delivery 5 items, KERN EWJ-A04S05
- Internal rechargeable battery pack, operating time up to 57 h without backlight, charging time approx. 6,5 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
- **2** 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

Note: Official verification is mandatory for commercial trade

STANDARD												OPTION		FACTORY	
CAL INT	CAL EXT	MEMORY	RS 232	PCS	RECIPE	SUM	PERCENT	UNIT	TOL	MULTI	MULTI	DMS	2 DAYS	ACCU	DAkkS +3 DAYS	ACCU	+3 DAYS
EWJ	IFS	IFS	in use		EWJ	IFS	EWJ	EWJ	IFS	IFS	EWJ			EWJ		IFS	

Model	Quantity scale		Weighing plate	Reference scale		Smallest part weight (Normal) g/piece	Options	
	Weighing range	Readability		Weighing range	Readability		Verification	DAkkS Calibr. Certificate
							M	DAkkS
KERN	[Max] kg	[d] g		[Max] g	[d] g		KERN	KERN
CCA 6K-5M	3 | 6	1 | 2	A	600	0,01	0,2	965-228-216	962-128-127
CCA 6K-4M	3 | 6	1 | 2	A	6000	0,1	1	965-229-216	962-129-127
CCA 10K-5M	6 | 15	2 | 5	A	600	0,01	0,2	965-228-216	962-128-127
CCA 10K-4M	6 | 15	2 | 5	A	6000	0,1	1	965-229-216	962-129-127
CCA 30K-5M	15 | 30	5 | 10	B	600	0,01	0,2	965-228-216	962-128-127
CCA 30K-4M	15 | 30	5 | 10	B	6000	0,1	1	965-229-216	962-129-127
CCA 60K-5M	30 | 60	10 | 20	B	600	0,01	0,2	965-229-216	962-128-127
CCA 60K-4M	30 | 60	10 | 20	B	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	962-128-127
CCA 100K-4M	60 | 150	20 | 50	C	6000	0,1	1	965-229-216	962-129-127

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.

PREMIUM
★★★

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 high-capacity 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

- 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 IP65
- 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
- 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
- Models with weighing plate size **I**

U-shaped weighing bridge KERN KFU-V20

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

Counting System KERN CCS
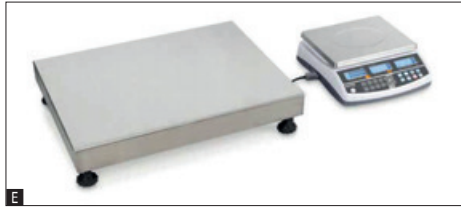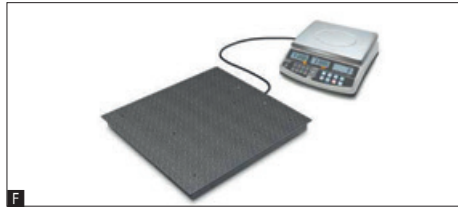
Technical data

Reference scale KERN CFS
- Dimensions weighing surface, stainless steel
  - **1** [d] = 0,001 g: ∅ 80 mm
  - [d] ≥ 0,01 g: W×D 295×225 mm
- Overall dimensions W×D×H 315×350×100 mm
- Net weight
  - **1** [d] = 0,001 g: approx. 2,6 kg
  - [d] ≥ 0,01 g: approx. 3,4 kg

Quantity platforms, KERN KFP-V20 IP65
- Weighing platform 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 platform dimensions, coated metal
  - **F** 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 platform dimensions, coated metal
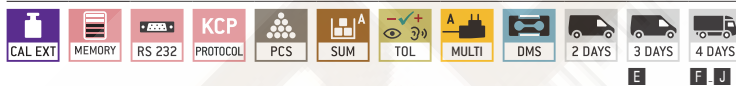 - **I** W×D×H 1500×1250×80 mm

Bulk pallet load handling, KERN KFU-V20
- Weighing platform dimensions, coated metal
  - **J** W×D×H 840×1190×90 mm

- Connection cable approx.
  - **A** - **E** 3 m
  - **F** - **J** 5 m

Accessories
- Protective working cover, scope of delivery 5 items, KERN CFS-A02S05
- **2** Suitable for models with weighing plate size **A** - **E**: 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*

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STANDARD | | | | | | | | | | | OPTION

| CAL EXT | MEMORY | RS 232 | KCP PROTOCOL | PCS | SUM | TOL | MULTI | DMS | 2 DAYS | 3 DAYS E | 4 DAYS F·J | ACCU | DAkkS +3 DAYS |

Model	Quantity scale			Reference scale		Counting resolution	Smallest part weight (Normal)	Options DAkkS Calibr. Certificate
KERN	Weighing range [Max] kg	Readability [d] g	Weighing plate	Weighing range [Max] g	Readability [d] g	Points	g/piece	DAkkS 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	B	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	H	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	I	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.

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.

KERN platform scales – as versatile as your areas of use

- Entry-level models – portable, economical and well-made – e.g. for weighing post and packages
- High-quality models – with high IP rating and with EC type approval for commercial trade
- Top models – as a user-friendly solution for a wide range of recipe weighing or check-weighing applications with relay control and much more

Tip: With KERN EasyTouch you can expand the range of possible applications for efficient balances even further.

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 totalising functions, data interfaces (RS 232, RS 485, USB, Bluetooth, WLAN, Ethernet, analogue module), 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 ambient conditions is unstable.

The very best in user-friendliness

With KERN EasyTouch on the display device (PC, laptop, tablet, smartphone), the display can be connected wirelessly via Bluetooth or WiFi. This means it is possible to weigh directly at the location of use and read the results from a distance of up to 20 metres.

You can find a large selection of platform scales and practical accessories, such as, for example, columns etc. in *Accessories* or on the internet.