Counting system KERN CCS

Quantity scale KERN KFP

Reference scale KERN CFS

Counting system to count the smallest parts in the largest quantities, counting resolution up to 999,999 points

Features

- **This highly accurate counting system** KERN CCS can replace a whole range of individual counting scales, efficiently and at a reasonable price

Reference scale KERN CFS:

- This professional KERN CFS counting scale, which can also be used as a stand-alone scale, meets the highest demands for accuracy, weighing range and volume of items, by beeing connected to a high-capacity weighing bridge
- **Programmable using numerical key pad**:
  - required reference quantity
  - known reference weight
- **Memory (→PLU) for 100 items** with additional text
- **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 reference weight optimisation of reference weight gradually improves the average piece weight value
- For additional details on the KERN CFS reference scale, see page 91

Quantity scale KERN KFP:

- The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge) KERN KFP
- **Stainless steel weighing plate**, painted steel base with A - E
- **Aluminium singlepoint load cell** (1 x 3000 e), protection against dust and water splashes IP65
- For additional details on the KERN KFP and KFU quantity scale, see page 150 - 152

Counting system KERN CCS

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Technical data

CFS:

- Large backlit LCD displays, digit height 20 mm
- Overall dimensions WxDxH 320x350x125 mm
- Weighing plate dimensions, stainless steel
  1 CFS 300-3 Ø 80 mm
  CFS 3K-5, CFS 6K0.1 WxD 294x225 mm
- Net weight approx. 3,3 kg

KFP/KFU:

- Weighing plate dimensions, stainless steel, WxDxH
  A 230x230x110 mm
  B 300x240x110 mm
  C 400x300x128 mm
  D 500x400x137 mm
  E 650x500x142 mm
  F 1000x1000x80 mm
  G 1500x1250x80 mm
  H 1500x1500x80 mm
  I 842x1300x90 mm
- Connection cable
  A - E approx. 2,5 m
  F - I approx. 5 m

Accessories

- **Reference scale** also available separately, for details, see page 91,
  KERN CFS 300-3
  KERN CFS 3K-5
  KERN CFS 6K0.1
- **Protective working cover** over keyboard and housing standard. Can be re-ordered, scope of delivery: 5 items, for models with weighing plate size WxD 300x225 mm, KERN CFS-A02S05
- **Rechargeable battery pack internal**, operating time up to 70 h without backlight, charging time approx. 14 h, not for models CFS 300-3, KERN GAB-A04

! 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

- 2 **Signal lamp** for visual support of weighing with tolerance range. Three-colour LED (yellow, green, red). Overall dimensions WxDxH 100x180x300 mm, for details, see page 181, 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, for details, see page 181, KERN CFS-A04
- **Suitable printers** and further, extensive accessories from page 177

STANDARD

CAL EXT · MEMORY · RS 232 · DUAL · PCS · SUM · TOL · MULTI · DMS · 4 DAY · 5 DAYS (with [Max] ≥ 600 kg) · 3 YEARS WARRANTY

OPTION

ACCU · DAkkS +3 DAYS

Model KERN	Quantity scale KFP	Weighing range [Max] kg	Readout [d] g	Weighing plate	Reference scale CFS	Weighing range [Max] g	Readout [d] g	Min. piece weight [Counting] g/piece		Option DAkkS Calibr. Certificate DKD KERN	
CCS 6K-6	**KFP 6V20M**	6	2	A	**CFS 300-3**	300	0,001	0,005		962-128-127	
CCS 10K-6	**KFP 15V20M**	15	5	B	**CFS 300-3**	300	0,001	0,005		962-128-127	
CCS 30K0.01.	**KFP 30V20M**	30	10	C	**CFS 3K-5**	3000	0,01	0,05		962-128-127	
CCS 30K0.1.	**KFP 30V20M**	30	10	C	**CFS 6K0.1**	6000	0,1	0,1		962-128-128	
CCS 60K0.01.	**KFP 60V20M**	60	20	C	**CFS 3K-5**	3000	0,01	0,05		962-129-127	
CCS 60K0.01L.	**KFP 60V20LM**	60	20	D	**CFS 3K-5**	3000	0,01	0,05		962-129-127	
CCS 60K0.1.	**KFP 60V20M**	60	20	C	**CFS 6K0.1**	6000	0,1	0,1		962-129-128	
CCS 60K0.1L.	**KFP 60V20LM**	60	20	D	**CFS 6K0.1**	6000	0,1	0,1		962-129-128	
CCS 150K0.01	**KFP 150V20M**	150	50	D	**CFS 3K-5**	3000	0,01	0,05		962-129-127	
CCS 150K0.01L	**KFP 150V20LM**	150	50	E	**CFS 3K-5**	3000	0,01	0,05		962-129-127	
CCS 150K0.1.	**KFP 150V20M**	150	50	D	**CFS 6K0.1**	6000	0,1	0,1		962-129-128	
CCS 150K0.1L	**KFP 150V20LM**	150	50	E	**CFS 6K0.1**	6000	0,1	0,1		962-129-128	
CCS 300K0.1	**KFP 300V20M**	300	100	E	**CFS 6K0.1**	6000	0,1	0,1		962-129-128	
CCS 300K0.01	**KFP 300V20M**	300	100	E	**CFS 3K-5**	3000	0,01	0,05		962-129-127	
CCS 600K-2	**KFP 600V20SM**	600	200	F	**CFS 3K-5**	3000	0,01	0,05		962-130-127	
CCS 600K-2L	**KFP 600V20M**	600	200	G	**CFS 3K-5**	3000	0,01	0,05		962-130-127	
CCS 600K-2U	**KFU 600V20M**	600	200	I	**CFS 3K-5**	3000	0,01	0,05		962-130-127	
CCS 1T-1	**KFP 1500V20SM**	1500	500	F	**CFS 6K0.1**	6000	0,1	0,1		962-130-128	
CCS 1T-1L	**KFP 1500V20M**	1500	500	G	**CFS 6K0.1**	6000	0,1	0,1		962-130-128	
CCS 1T-1U	**KFU 1500V20M**	1500	500	I	**CFS 6K0.1**	6000	0,1	0,1		962-130-128	
CCS 3T-1	**KFP 3000V20M**	3000	1000	G	**CFS 6K0.1**	6000	0,1	0,1		962-132-128	
CCS 3T-1L	**KFP 3000V20LM**	3000	1000	H	**CFS 6K0.1**	3000	0,01	0,1		962-132-128	

KERN Pictograms:

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

Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required.

Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.

Alibi memory: Electronic archiving of weighing results, complying with the 2009/23/EC standard.

Data interface RS-232: To connect the balance to a printer, PC or network.

RS-485 data interface: To connect the balance to a printer, PC or other peripherals. High tolerance against electromagnetic disturbance.

USB data interface: To connect the balance to a printer, PC or other peripherals.

Bluetooth* data interface: To transfer data from the balance to a printer, PC or other peripherals.

WLAN data interface: To transfer data from the balance to a printer, PC or other peripherals.

Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.

Interface for second balance: For direct connection of a second balance.

Network interface: For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter.

Wireless data transfer: between the weighing unit and the evaluation unit using an integrated radio module.

GLP/ISO log: The balance displays the weight, date and time, regardless of a printer connection.

GLP/ISO log: With weight, date and time. Only with KERN printers.

Piece counting: Reference quantities selectable. Display can be switched from piece to weight.

Recipe level A: Separate memory for the weight of the tare container and the recipe ingredients (net total).

Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.

Recipe level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, barcode.

Totalising level A: The weights of similar items can be added together and the total can be printed out.

Totalising level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, barcode recognition.

Percentage determination: Determining the deviation in % from the target value (100 %).

Weighing units: Can be switched to e.g. non-metric units at the touch of a key. See balance model. Please refer to KERN's website for more details.

Weighing with tolerance range: Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning.

Hold function: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.

Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram.

ATEX explosion protection: Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.

Stainless steel: The balance is protected against corrosion.

Suspended weighing: Load support with hook on the underside of the balance.

Battery operation: Ready for battery operation. The battery type is specified for each device.

Rechargeable battery pack: Rechargeable set.

Universal mains adapter: with universal input and optional input socket adapters for
A) EU, GB
B) EU, GB, CH, USA
C) EU, GB, CH, USA, AUS

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

Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request.

Weighing principle: Strain gauge Electrical resistor on an elastic deforming body.

Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate.

Weighing principle: Electromagnetic force compensation Coil inside a permanent magnet. For the most accurate weighings.

Weighing principle: Single cell technology Advanced version of the force compensation principle with the highest level of precision.

Verification possible: The time required for verification is specified in the pictogram.

DAkkS calibration possible (DKD): The time required for DAkkS calibration is shown in days in the pictogram.

Package shipment: The time required for internal shipping preparations is shown in days in the pictogram.

Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram.

Warranty: The warranty period is shown in the pictogram.

KERN – Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight in the international OIML error limit classes E1-M3 from 1 mg - 2000 kg. In combination with a DAkkS calibration certificate the best pre-requisite for proper balance calibration.

The KERN DAkkS calibration laboratory today is one of the most modern and best-equipped DAkkS calibration laboratories for balances, test weights and force-measurement in Europe.
Thanks to the high level of automation, we can carry out DAkkS calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

Range of services:
- DAkkS calibration of balances with a maximum load of up to 50 t
- DAkkS calibration of weights in the range of 1 mg – 2500 kg
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DAkkS calibration certificates in the following languages D, GB, F, I, E, NL, PL

Your KERN specialist dealer:

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