



Quantity scale KERN KFP

Reference scale KERN CFS

Counting system to count very small parts in 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:

- The 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 being connected to a high-capacity weighing bridge (up to 999.999 pieces)

• 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 gradually improves the average value of the piece weight

• For additional details on the KERN CFS reference scale, see page 92

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**, see page 97

• **Aluminium singlepoint load cell**

(1 x 3000 e), dust and spray protection IP65

• For additional details on the KERN KFP quantity scale, see page 138

Counting system KERN CCS



Technical data

CFS:

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

KFP:

- Dimensions of weighing plate, stainless steel, WxDxH
 - ▮ A 230x230x100 mm
 - ▮ B 300x240x100 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

Accessoires

- **Reference scale** also available separately, details see page 92, KERN CFS 300-3, KERN CFS 3K-5, KERN CFS 6K0.1
- **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
- **Signal lamp** for visual support of weighing with tolerance range. Three-colour LED (yellow, green, red). Overall dimensions WxDxH 100x180x300 mm, details see page 160, KERN CFS-A03

Information on other high-capacity bulk scales, 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 scale (d = 0.1g), please refer to the website

- **Y cable** for parallel connection of two terminal devices to the RS-232 interface on the balance, e.g. signal lamp and printer, details see page 160, KERN CFS-A04
- **Suitable printers** and further, extensive accessories from page 157 ff.

STANDARD



only CFS









































OPTION



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

NEW New model

KERN Pictograms

 Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven).	 Recipe level A: Separate memory for the weight of the tare container and the recipe ingredients (net total).	 Suspended weighing: Load support with hook on the underside of the balance.
 Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required.	 Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.	 Battery operation: Ready for battery operation. The battery type is specified for each device.
 Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	 Recipe level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation functions.	 Rechargeable battery pack: Rechargeable set.
 Data interface RS-232: To connect the balance to a printer, PC or network.	 Totalising level A: The weights of similar items can be added together and the total can be printed out.	 Mains adapter: 230V/50Hz in standard version for EU. On request GB, AUS or USA version available.
 RS-485 data interface: To connect the balance to a printer, PC or other peripherals. High tolerance against electromagnetic disturbance.	 Totalising level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation.	 Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 USB data interface: To connect the balance to a printer, PC or other peripherals.	 Strain gauges: Electrical resistor on an elastic deforming body.	 Tuning fork principle: A resonating body is electromagnetically excited, causing it to oscillate.
 Bluetooth data interface: To transfer data from the balance to a printer, PC or other peripherals.	 Percentage determination: Determining the deviation in % from the target value (100 %).	 Electromagnetic force compensation: Coil inside a permanent magnet. For the most accurate weighings.
 WLAN data interface: To transfer data from the balance to a printer, PC or other peripherals.	 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.	 Single cell technology: Advanced version of the force compensation principle with the highest level of precision.
 Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.	 Weighing with tolerance range: Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning.	 Verification possible: The time required for verification is specified in the pictogram.
 Interface for second balance: For direct connection of a second balance.	 Vibration-free weighing: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.	 DAkkS calibration possible: The time required for DAkkS calibration is shown in days in the pictogram.
 Network interface: For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter.	 Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram. For details see the glossary.	 Package shipment: The time required for internal shipping preparations is shown in days in the pictogram.
 GLP/ISO log: The balance displays the weight, date and time, regardless of a printer connection.	 ATEX explosion protection: Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.	 Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram.
 GLP/ISO log: With weight, date and time. Only with KERN printers, see "Accessories"	 Stainless steel: The balance is protected against corrosion.	 Warranty: The warranty period is shown in the pictogram.
 Piece counting: Reference quantities selectable. Display can be switched from piece to weight.		

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.

Your KERN specialist dealer:

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 6 t
- DAkkS calibration of weights in the range of 1 mg - 500 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