



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

- 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 range and volume of items, by being 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, reference weight and tare weight, e.g. of a container
- **Fill-to-target function:** Programmable target quantity or target weight. A 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

### Quantity scale KERN KFP V20 IP65

- The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge) KERN CCS. In this way even the smallest of parts can be counted in large volumes
- weighing plate stainless steel, painted steel base, for models with weighing plate size **A – E**
- **Aluminium singlepoint load cell** (1×3000e), protection against dust and water splashes IP65

### Technical data

#### CFS

- Overall dimensions W×D×H  
320×350×180 mm

- Dimensions weighing surface, stainless steel  
**I** CFS 300-3: Ø 80 mm  
CFS 3K-5, CFS 6K0.1: W×D  
300×225 mm
- Net weight approx. 2,6 kg

### KFP/KFU

- Weighing plate dimensions W×D×H, stainless steel  
**A** 230×230×110 mm  
**B** 300×240×110 mm  
**C** 400×300×128 mm  
**D** 500×400×137 mm  
**E** 500×650×135 mm  
**F** 1000×1000×80 mm  
**G** 1500×1250×80 mm  
**H** 1500×1500×80 mm  
**I** 842×1300×90 mm
- Connection cable approx.  
**A – E** 2 m  
**F – I** 5 m

## Counting system KERN CCS

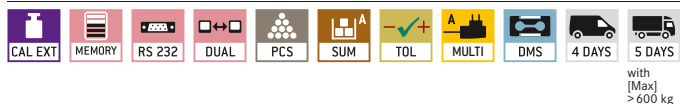


### Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN CFS-A02S05
- **Rechargeable battery pack internal**, operating time up to 60 h without backlight, charging time approx. 12 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 or barcode reader and printer, KERN CFS-A04
- Further details, plenty of further accessories and suitable printers see *Accessories*

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

#### STANDARD



#### OPTION



Model	Quantity scale	Weighing range [Max] kg	Readout [d] g	Weighing plate	Reference scale	Weighing range [Max] kg	Readout [d] g	Options	
								DAKKS Calibr. Certificate	
								DKD KERN	
KERN	KFP				CFS				
CCS 6K-6	KFP 6V20M	6	2	A	CFS 300-3	0,3	0,001	962-128-127	
CCS 10K-6	KFP 15V20M	15	0,5	B	CFS 300-3	0,3	0,001	962-128-127	
CCS 30K0.01.	KFP 30V20M	30	1	C	CFS 3K-5	3	0,01	962-128-127	
CCS 30K0.1.	KFP 30V20M	30	1	C	CFS 6K0.1	6	0,1	962-128-128	
CCS 60K0.01.	KFP 60V20M	60	0,2	C	CFS 3K-5	3	0,01	962-129-127	
CCS 60K0.01L.	KFP 60V20LM	60	0,2	D	CFS 3K-5	3	0,01	962-129-127	
CCS 60K0.1.	KFP 60V20M	60	0,2	D	CFS 6K0.1	6	0,1	962-129-128	
CCS 60K0.1L.	KFP 60V20LM	60	0,2	D	CFS 6K0.1	6	0,1	962-129-128	
CCS 150K0.01	KFP 150V20M	150	5	D	CFS 3K-5	3	0,01	962-129-127	
CCS 150K0.01L	KFP 150V20LM	150	5	E	CFS 3K-5	3	0,01	962-129-127	
CCS 150K0.1.	KFP 150V20M	150	5	D	CFS 6K0.1	6	0,1	962-129-128	
CCS 150K0.1L	KFP 150V20LM	150	5	E	CFS 6K0.1	6	0,1	962-129-128	
CCS 300K0.1	KFP 300V20M	300	10	E	CFS 6K0.1	6	0,1	962-129-128	
CCS 300K0.01	KFP 300V20M	300	10	E	CFS 3K-5	3	0,01	962-129-127	
CCS 600K-2	KFP 600V20SM	600	200	F	CFS 3K-5	3	0,01	962-130-127	
CCS 600K-2L	KFP 600V20M	600	200	G	CFS 3K-5	3	0,01	962-130-127	
CCS 600K-2U	KFU 600V20M	600	200	H	CFS 3K-5	3	0,01	962-130-127	
CCS 1T-1	KFP 1500V20SM	1500	500	F	CFS 6K0.1	6	0,1	962-130-128	
CCS 1T-1L	KFP 1500V20M	1500	500	G	CFS 6K0.1	6	0,1	962-130-128	
CCS 1T-1U	KFU 1500V20M	1500	500	H	CFS 6K0.1	6	0,1	962-130-128	
CCS 3T-1	KFP 3000V20M	3000	1000	G	CFS 6K0.1	6	0,1	962-132-128	
CCS 3T-1L	KFP 3000V20LM	3000	1000	H	CFS 6K0.1	6	0,1	962-132-128	

# KERN Pictograms:



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



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



**Rechargeable battery pack:** Rechargeable set.



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



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



**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



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



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



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



**Alibi memory:** Electronic archiving of weighing results, complying with the 2014/31/EU standard.



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



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



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



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



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



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



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



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



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



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



**Bluetooth\* 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.



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



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



**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.



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



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



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



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



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



**Package shipment:** The time required for internal shipping preparations 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.



**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.



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



**Stainless steel:** The balance is protected against corrosion.



**Warranty:** The warranty period is shown in the pictogram.



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



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



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



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

## 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 - 2500 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
- Volume determination and measuring of magnetic susceptibility (magnetic characteristics) for test weights
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DAkKS calibration certificates in the following languages DE, GB, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

## Your KERN specialist dealer: