

Counting system KERN CCA



High-resolution counting system with EC type approval to count the smallest parts in large quantities, maximum number of parts which can be displayed is 999,999 – many new models now

Features

- The highly accurate KERN CCA counting system can replace a whole range of individual balances, efficiently and at a reasonable price
- Thanks to EC type approval, 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 an end unit, such as, for example, signal lamps, barcode scanners or printers

Reference scale KERN

- This precision balance, which can be used as an individual balance, also fulfils the highest demands through connection with a high-capacity weighing bridge
- Programmable using numerical key pad:
 required reference quantity
- known reference weight
- Easy to use: All primary functions have their own key on the keypad
- Automatic internal adjustment, time-controlled every 2 h, guarantees high degree of accuracy and makes the balance independent of its location
- Capacity display: A bargraph display lights up to show how much of the weighing range is still available
- USB data interface for transferring weighing data to the PC, printer etc. Can only be used in combination with KERN DBS-A02 accessories
- 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 (= weighing bridge) KERN CCA. 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 included with delivery

KERN BALANCES & TEST SERVICES 2022

Counting system KERN CCA







Technical data

Reference scale KERN EWJ

- Overall dimensions
 [Max] 600 g: 220×340×180 mm (incl. draught shield)
 [Max] 6000 g: 220×315×90 mm
- Dimensions of weighing surface, stainless steel, [Max] 600 g: Ø 120 mm
- [Max] 6000 g: B×T 155×145 mm • Net weight [Max] 600 g: 3,2 kg
- [Max] 6000 g: 3,4 kg • Connection cable approx. 1,5 m

Quantity scale KERN IFS

- Dimensions of weighing plate
 300×240×110 mm
 400×300×120 mm
- C 500×400×140 mm
- D 650×500×140 mm



Accessories

Reference scale KERN EWJ

- Protective working cover, scope of delivery: 5 items, KERN EWJ-A04S05
- Internal rechargable battery pack, operating time up to 15 h without backlight, charging time approx. 4h, KERN KFB-A01

Quantity scale KERN IFS

- Protective working cover, scope of delivery: 5 items, KERN KFB-A02S05
- Stand to elevate display device Height of stand approx. 330 mm, KERN IFB-A01 Height of stand approx. 600 mm, for

models with weighing plate size **D**, **D**, KERN IFB-A02

- Internal rechargable battery pack, operating time up to 18 h without backlight, charging time approx. 12 h, Factory Option, KERN KFB-A01
- Signal lamp for visual support of weighing with tolerance range, only in combination with CCA-A02, KERN CFS-A03
- Y-cable, RS-232, KERN CCA-A01
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD						OPTION	FACTO	RY		
	•***	▲^	C	-√+ <mark>A </mark>	📙 🖂 🛼	.)	DAkkS 🛄	M		
CAL INT CAL EXT MEMOR		ECIPE SUM PERC		TOL MULTI MU		4 DAYS ACCU		J +3 DAYS		
EWJ IFS IFS	occupied EW	J IFS	EWJ	IFS IFS EWJ	A _ C	D EWJ	IFS			
Model	Weighing capacity	Readability	Weighing	Weighing capacity	Readability	Counting	Smallest part		Optior	n l
	Quantity scale	Quantity scale	plate	Reference scale	Reference scale	resolution	weight		Verificat	ion
	[Max]	[d]		[Max]	[d]		[Normal]		MIII	
KERN	kg	g		g	g	Points	g/piece		KERN	
Note	: For applications t	hat require verif	cation, ple	ease order verificat	ion at the same t	time, initial verifi	cation at a later	date is not po	ossible.	
		Verification	at the fact	tory, we need to kn	ow the full addre	ess of the locatio	n of use.			
CCA 6K-5M	3 6	1 2	Α	600	0,01	30.000	0,2		965-228-216	
ССА 6К-4М 🔤	3 6	1 2	A	6000	0,1	30.000	0,2		965-228-217	
CCA 10K-5M	6 15	2 5	A	600	0,01	75.000	0,2		965-228-216	
CCA 10K-4M 🔤	6 15	2 5	A	6000	0,1	75.000	0,2		965-228-217	
CCA 30K-5M	15 30	5 10	В	600	0,01	150.000	0,2		965-228-216	
CCA 30K-4M 🔤	15 30	5 10	В	6000	0,1	1.500.000	0,2		965-228-217	
CCA 60K-5M	30 60	10 20	В	600	0,01	300.000	0,2		965-229-216	
CCA 60K-4M 🔤	30 60	10 20	В	6000	0,1	3.000.000	0,2		965-229-217	
CCA 100K-5M	60 150	20 50	C	600	0,01	750.000	0,2		965-229-216	
CCA 100K-4M 🔤	60 150	20 50	C	6000	0,1	7.500.000	0,2		965-229-217	
CCA 300K-5M	150 300	50 100	D	600	0,01	1.500.000	0,2		965-229-216	
CCA 300K-4M 🔤	150 300	50 100	D	6000	0,1	15.000.000	0,2		965-229-217	
🔤 New model										

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KERN BALANCES & TEST SERVICES 2022

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



Easy Touch:

Suitable for the connection, data transmission and control through PC or tablet.

Memory: MEMORY

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



Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.

Data interface RS-232:

• 6550.• To connect the balance to a printer, PC or RS 232 network



RS-485 data interface:

To connect the balance to a printer, PC or other peripherals. Suitable for datatransfer over large distances. Network in bus topology is possible



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



*

WiFi 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.



Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements



Interface for second balance:

KERN – Precision is our business

For direct connection of a second balance



balance calibration.

ment in Europe

Range of services:

characteristics) for test weights

· Calibration of force-measuring devices

Network interface:

For connecting the scale to an Ethernet network

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

The KERN DAkkS calibration laboratory today is one of the most modern and bestequipped DAkkS calibration laboratories for balances, test weights and force-measure-

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.

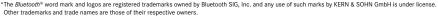
· Volume determination and measuring of magnetic susceptibility (magnetic

· Conformity evaluation and reverification of balances and test weights

· Database supported management of checking equipment and reminder service

· DAkkS calibration certificates in the following languages DE, EN, FR, IT, ES, NL, PL

· 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





KCP

PROTOCOL

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

Piece counting:

connection

digital systems GLP/ISO log:

Reference quantities selectable. Display can PCS be switched from piece to weight

KERN Communication Protocol (KCP):

It is a standardized interface command set for

KERN balances and other instruments, which

devices featuring KCP are thus easily integrated

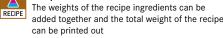
with computers, industrial controllers and other

The balance displays serial number, user ID,

weight, date and time, regardless of a printer

allows retrieving and controlling all relevant parameters and functions of the device. KERN

Recipe level A:



Recipe level B:

Internal memory for complete recipes with name RECIPE and target value of the recipe ingredients. User guidance through display

Totalising level A:

Η' The weights of similar items can be added SUM together and the total can be printed out

Percentage determination:

Determining the deviation in % from the target value (100 %)

Weighing units:

Can be switched to e.g. nonmetric units. See UNIT balance model. Please refer to KERN's website for more details



Weighing with tolerance range:

(Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model

Hold function:

^-(Animal weighing program) When the weighing MOVE conditions are unstable, a stable weight is calculated as an average value



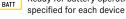
Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram.

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

Battery operation:







Ready for battery operation. The battery type is

Rechargeable battery pack: Rechargeable set



Universal plug-in power supply:

with universal input and optional input socket MULTI adapters for A) EU, CH, GB; B) EU, CH, GB, USA; C) EU. CH. GB. USA. AUS



Plug-in power supply:

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

Integrated power supply unit:



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

1	DMS

Weighing principle: Strain gauges:

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:

DAkkS calibration possible (DKD):

is shown in days in the pictogram

Factory calibration (ISO):

Package shipment:

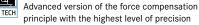
Pallet shipment:

The time required for DAkkS calibration

The time required for Factory calibration

The time required for internal shipping preparations

The time required for internal shipping preparations



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

М +3 DAYS

DAkkS

+3 DAYS

ISO

+4 DAYS

1 DAY

ò

2 DAYS

Your KERN specialist dealer: