KERN BALANCES & TEST SERVICES CATALOGUE 2020

Counting system KERN CCA





High-resolution counting system with EC type approval [M] to count the smallest parts in the largest quantities, counting resolution up to 300.000.000 points

Features

- The highly accurate KERN CCS counting system can replace a whole range of individual balances, efficiently and at a reasonable price
- Thanks to EC type approval [M], it is also suitable for use in verified applications
- The balances are connected to one another with an RS-232 Y-cable (KERN CCA-A01, included with delivery), 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 weighing bridge
- 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 accuracya and makes the balance independent of its location
- Draught shield standard, 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
- 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 (verifiable), reference weight, total pieces
- **100 item memories** for master data such as reference weight, reference quantity, container weight (PRE-TARE) etc.
- Printout of date and time for GLP and GMP compliant data logging
- **Precise counting:** The manual reference weight optimisation gradually improves the average value of the piece weight
- $\ensuremath{\text{Totalising}}$ of pieces when counting
- Aluminium Single-Point load cell (1×3000 e), protection against dust and water splashes IP65

 Protective working cover included with delivery

Technical data

Reference scale KERN EWJ

- Overall dimensions (incl. draught shield)
 W×D×H 220×340×321 mm
- Dimensions weighing surface, stainless steel ø 120 mm
- Net weight approx. 3,2 kg
- Connection cable approx. 1,5 m

Quantity scale KERN IFS

- Weighing plate dimensions W×D×H, stainless steel
- A 300×240×110 mm
- 400×300×120 mm, see larger picture
- C 500×400×140 mm
- D 650×500×140 mm

Accessories

- Signal lamp for visual support of weighing with tolerance range, KERN CFS-A03
- **RS-232/WiFi adapter** for wireless connection to networks and WiFi capable devices, such as tablets, laptops or smartphones, KERN YKI-03
- **RS-232/Ethernet adapter** for connection to an IP-based Ethernet network, KERN YKI-01

Reference scale KERN EWJ

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

Quantity scale KERN IFS

OPTION

- **Protective working cover**, scope of delivery: 5 items, KERN KFB-A02S05
- Rechargeable battery pack internal, operating time up to 40 h, without backlight, charging time approx. 12 h, must be ordered at purchase, KERN KFB-A01
- Further details, plenty of further accessories and suitable printers see *Accessories*

FACTORY

CAL INT EWJ	CAL EXT	MEMORY	RS 232	USB EWJ	PCS	RECIPE EWJ	SUM IFS	% Percent	UNIT EWJ	-√+ ຈູາ TOL IFS	MULTI IFS	B MULTI EWJ	DMS	2 DAYS	2 DAYS vith [Max] ≥ 300 kg	ACCU EWJ	DAkks +3 days	ACCU IFS	H3 DAYS
															≥ 300 kg				

Model	Weighing capacity	Readability	Weighing	Weighing capacity	Readability	Counting	Smallest part	Optio	n
	Quantity scale	Quantity scale	plate	Reference scale	Reference scale	resolution	weight	Verification	
	[Max]	[Max] [d]		[Max]	[d]		[Normal]	MIII	
KERN	kg	g		g	g	Points	g/piece	KERN	
CCA 6K-5M	3 6	1 2	A	600	0,01	6.000.000	0,2	965-228-216	
CCA 10K-5M	6 15	2 5	A	600	0,01	15.000.000	0,2	965-228-216	
CCA 30K-5M	15 30	5 10	В	600	0,01	30.000.000	0,2	965-228-216	
CCA 60K-5M	30 60	10 20	В	600	0,01	60.000.000	0,2	965-229-216	
CCA 100K-5M	60 150	20 50	C	600	0,01	150.000.000	0,2	965-229-216	
CCA 300K-5M	150 300	50 100	C	600	0,01	300.000.000	0,2	965-229-216	

Datasheet_CCA_V1

STANDARD

KERN BALANCES & TEST SERVICES CATALOGUE 2020



Internal adjusting:

Quick setting up of the balance's accuracy with CAL INT internal adjusting weight (motordriven)

Adjusting program CAL:

For quick setting up of the balance's accuracy. External adjusting weight required



CAL EXT

Easy Touch:

Suitable for the connection, data transmission and control through PC, tablet or smartphone Memory:

Balance memory capacity, e.g. for article data,

MEMORY

weighing data, tare weights, PLU etc. Alibi memory: Secure, electronic archiving of weighing results,

ALIBI 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:

• 6534 • To connect the balance to a printer, PC or other RS 485 peripherals. Suitable for data transfer over large distances. Network in bus topology is possible



USB data interface:

Bluetooth* data interface:

To connect the balance to a printer, PC or other peripherals

₿ BT

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.

to connect a suitable peripheral device for ANALOG

analogue processing of the measurements Interface for second balance:

For direct connection of a second balance



Network interface:

Analogue interface:

For connecting the scale to an Ethernet network



LAN

Wireless data transfer:

between the weighing unit and the evaluation unit using an integrated radio module

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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 bestequipped 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

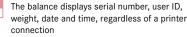


PCS

PROTOCOL

GLP/ISO log:

digital systems



KERN Communication Protocol (KCP):

It is a standardized interface command set for

KERN balances and other instruments, which

parameters and functions of the device. KERN

devices featuring KCP are thus easily integrated

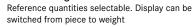
with computers, industrial controllers and other

allows retrieving and controlling all relevant

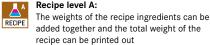
GLP/ISO log:

With weight, date and time. Only with KERN PRINTER printers

Piece counting:



Recipe level A:



Recipe level B:

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

Recipe level C: ∠^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

Totalising level A:

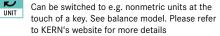
The weights of similar items can be added SUM together and the total can be printed out



Percentage determination:

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

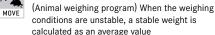
Weighing units: C

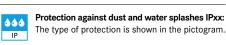


Weighing with tolerance range: ○ 3)

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

M--Hold function:





KERN

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 BATT specified for each device



INOX

Rechargeable battery pack: Rechargeable set



Universal mains adapter:

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

Mains adapter:

230V/50Hz in standard version for EU, CH. 230 V 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 gauges Electrical resistor on an elastic deforming body

(((1))) T-FORK

s T

Weighing principle: Tuning fork A resonating body is electromagnetically

excited, causing it to oscillate

Weighing principle: Electromagnetic force

compensation FORCE Coil inside a permanent magnet. For the most accurate weighings

SC TECH

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

Μ

Verification possible: The time required for verification is specified in

Package shipment:

Pallet shipment:

DAkkS calibration possible:

is shown in days in the pictogram

The time required for DAkkS calibration

The time required for internal shipping

The time required for internal shipping

preparations is shown in days in the pictogram

preparations is shown in days in the pictogram

the pictogram

+3 DAYS

DAkkS

+3 DAYS

1 DAY

2 DAYS

Your KERN specialist dealer: