

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

# **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 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 accuracy and makes the balance independent of its location
- Draught shield standard for models with [Max] = 600 g, weighing space W×D×H 134×128×80 mm
- · Protective working cover included with delivery

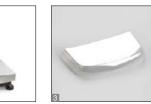
#### **Quantity scale KERN IFS**

- The high-accuracy quantity counting takes place on the weighing platform (= weighing bridge) IFS. 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

# Counting system KERN CCA













Note: Official verification is mandatory for commercial trade



#### **Technical data**

### Reference scale KERN EWJ

- Dimensions weighing surface, stainless steel [Max] 600 g: Ø 120 mm, see larger picture **■** [Max] 6000 g: W×D 155×145 mm
- Overall dimensions W×D×H [Max] 600 g: 220×340×180 mm (incl. draught shield) [Max] 6000 g: 215×330×105 mm
- · Net weight [Max] 600 g: approx. 3,2 kg [Max] 6000 g: approx. 3,4 kg

### **Quantity scale KERN IFS**

- Dimensions weighing surface, stainless steel
  - M W×D×H 300×240×110 mm
  - **B** W×D×H 400×300×120 mm
  - **W**×D×H 500×400×140 mm
  - **I** W×D×H 650×500×140 mm
- Cable length of display device approx. 3 m

# **Counting system KERN CCA**

- Connection cable approx. 1,5 m
- · Net weight
  - A approx. 9 kg
  - B approx. 14 kg
  - approx. 16 kg
  - napprox. 24 kg

# **Accessories**

## Reference scale KERN EWJ

- 3 Protective working cover, scope of delivery 5 items, KERN EWJ-A04S05
- 5 Internal rechargable battery pack, operating time up to 20 h without backlight, charging time approx. 12 h, KERN KFB-A01

### **Quantity scale KERN IFS**

- 4 Protective working cover, scope of delivery 5 items, KERN KFB-A02S05
- 5 Internal rechargable battery pack, operating time up to 18 h without backlight, charging time approx. 12 h, KERN KFB-A01
- 6 ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- 2 Stand to elevate display device Height of stand approx. 330 mm, KERN IFB-A01 For models with weighing plate size A, B: Height of stand approx. 600 mm, KERN IFB-A02
- Further details, plenty of further accessories and suitable printers see Accessories

STANDARD





































Model	Weighing capacity	Readability	Weighing	Weighing capacity	Readability	Smallest part	Option	
	Quantity scale	Quantity scale	plate	Reference scale	Reference scale	weight	Verification DAkkS Calibr. Cert	tificate
	[Max]	[d]		[Max]	[d]	[Normal]	MIII DAkkS	
KERN	kg	g		g	g	g/piece	KERN KERN	
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible.								
Verification at the factory, we need to know the full address of the location of use.								
CCA 6K-5M	3   6	1   2	A	600	0,01	0,2	965-228-216 963-128-127	
CCA 6K-4M	3   6	1   2	A	6000	0,1	1	965-229-216 963-129-127	
CCA 10K-5M	6   15	2   5	A	600	0,01	0,2	965-228-216 963-128-127	
CCA 10K-4M	6   15	2   5	A	6000	0,1	1	965-229-216 963-129-127	
CCA 30K-5M	15   30	5   10	В	600	0,01	0,2	965-228-216 963-128-127	
CCA 30K-4M	15   30	5   10	В	6000	0,1	1	965-229-216 963-129-127	
CCA 60K-5M	30   60	10   20	В	600	0,01	0,2	965-229-216 963-129-127	
CCA 60K-4M	30   60	10   20	В	6000	0,1	1	965-229-216 963-129-127	
CCA 100K-5N	<b>M</b> 60   150	20   50	C	600	0,01	0,2	965-229-216 963-129-127	
CCA 100K-4N	<b>M</b> 60   150	20   50	C	6000	0,1	1	965-229-216 963-129-127	
CCA 300K-5N	<b>M</b> 150   300	50   100	D	600	0,01	0,2	965-229-216 963-129-127	
CCA 300K-4N	<b>M</b> 150   300	50   100	D	6000	0,1	1	965-229-216 963-129-127	





#### 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:

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.



#### **KERN Universal Port (KUP):**

allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WLAN, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort



#### 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. Suitable for data transfer 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:

For direct connection of a second balance



#### Network interface:

For connecting the scale to an Ethernet network



# KERN Communication Protocol (KCP):

It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers



#### GLP/ISO log:

The balance displays weight, date and time, independent of a printer connection

and other digital systems



#### 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: The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



# Recipe level B:

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



#### Totalising level A:

The weights of similar items can be added 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 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 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 balance



#### **Battery operation:**

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



#### Rechargeable battery pack:

Rechargeable set



#### Universal plug-in power supply:

with universal input and optional input socket 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



# 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:

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



# Factory calibration (ISO):

The time required for Factory 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

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