<u>KERN</u>

Counting System KERN CCA





# High-resolution counting system to count the smallest parts in large quantities, maximum number of parts which can be displayed is 999,999, verification optional

### **Features**

- The highly accurate KERN CCA counting system can replace a whole range of individual balances, efficiently and at a reasonable price
- Thanks to optional verification, 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 platform
- 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 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 over the display device included with the 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
  - **1** [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: 215×340×105 mm
- · Net weight [Max] 600 g: approx. 3,2 kg [Max] 6000 g: approx. 3,4 kg

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

- · Weighing plate dimensions, stainless steel
  - A W×D×H 300×240×105 mm
  - **B** W×D×H 400×300×114 mm
  - **G** W×D×H 500×400×140 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
- C approx. 16 kg

#### Accessories

#### Reference scale KERN EWJ

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

#### Quantity scale KERN IFS

- · Protective working cover over the display device, scope of delivery: 5 items, KERN KFB-A02S05
- · Internal rechargeable battery pack, operating time up to 18 h without backlight, charging time approx. 12 h, KERN KFB-A01
- 2 Stand to elevate display device Height of stand approx. 330 mm, KERN IFB-A01

For models with weighing plate size  ${\bf A}$ ,  ${\bf B}$ : Height of stand approx. 600 mm, KERN IFB-A02

- 3 ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- · Further details, plenty of further accessories and suitable printers see Accessories

STANDARD

































OPTION ACCU

FACTORY ACCU

Model	Quantity scale			Reference scale		Smallest	0	Options	
KERN	Weighing capacity [Max] kg	Readability [d] g	Weighing plate	Weighing capacity [Max] g	Readability [d] g	part weight (Normal) g/piece	Verification	DAkkS Calibr. Cert. DAkkS KERN	
Note: For devices that require verification (conformity assessment according to NAWI 2014/31/EU), please include the verification when placing your order.									
The initial verification is not possible after delivery. Please inform the full address of the location of use for the initial verification.									
CCA 6K-5M	3   6	1   2	Α	600	0,01	0,2	965-228-216	962-128-127	
CCA 6K-4M	3   6	1   2	Α	6000	0,1	1	965-229-216	962-129-127	
CCA 10K-5M	6   15	2   5	Α	600	0,01	0,2	965-228-216	962-128-127	
CCA 30K-5M	15   30	5   10	В	600	0,01	0,2	965-228-216	962-128-127	
CCA 30K-4M	15   30	5   10	В	6000	0,1	1	965-229-216	962-129-127	
CCA 60K-5M	30   60	10   20	В	600	0,01	0,2	965-229-216	962-129-127	
CCA 60K-4M	30   60	10   20	В	6000	0,1	1	965-229-216	962-129-127	
CCA 100K-5M	60   150	20   50	С	600	0,01	0,2	965-229-216	962-129-127	
CCA 100K-4M	60   150	20   50	С	6000	0,1	1	965-229-216	962-129-127	

# **BALANCES & TEST SERVICE 2024**

**KERN 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



#### **EasyTouch**

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, WIFI, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort



# RS-232 Data interface

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 and other digital systems



### GLP/ISO log intern

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



#### **GLP/ISO log Printer**

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 recipés 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 opera-

tion. The battery type is



BATT

# 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, US C) EU, CH, GB, US, AUS



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

Plug-in power supply



#### 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

M

#### Conformity Assessment

The time required for conformity assessment 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



<sup>\*</sup>The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Other trademarks and trade names are those of their respective owners