IoT-Line Counting scale KERN CDS

FACE LIFT

EasyTouch

IoT ready

Easy to use industrial counting scale for heavy loads, ideal for the various possibilities of Industry 4.0 applications, counting resolution up to 300,000 points

Features

- Self-explanatory, graphic control panel, the workings steps can be understood immediately, even without operating instructions
  - no learning time = reduces costs
  - ideal for untrained users
  - visualised process avoids operating errors
- The 4 steps are carried out from left to right:
  1 Place the empty container onto the weighing plate and tare by pressing the TARE key
  2 Place the reference quantity for the goods to be counted into the container (5, 10 or 20 pieces)
  3 Confirm the selected reference quantity by pressing the key (5, 10 or 20)
  4 Pour in the goods to be counted. The number of pieces will immediately be shown in the display
- Precise counting: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value

- KERN Universal Port (KUP): permits the connection of an external KUP interface adapter, such as, for example, RS 232, USB, Bluetooth or Ethernet, for the exchange of data and control commands, without any installation outlay
- KERN Communication Protocol (KCP): The KCP permits searching and remote control of the balance using external control devices or computers, for details see page 8/9
- Standardised, simplified concept of operation
- Protective working cover included with delivery

Technical data

- Backlit LCD display, digit height 21 mm
- Dimensions weighing surface, stainless steel
  A W×D 228×228 mm
  B W×D 308×318 mm, see larger picture
  C W×D 500×400 mm
- Dimensions of display device W×D×H 225×115×60 mm
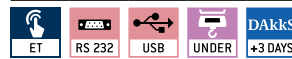- Permissible ambient temperature -10 °C/40 °C

Accessories

- Protective working cover over the display device, scope of delivery 5 items, KERN DE-A12S05
- Mount to fasten the display device to the platform, for models with weighing plate size B, C, KERN DE-A11N
- 5 Stand to elevate display device, height of stand approx. 480 mm, for models with weighing plate size B, KERN DE-A10 for models with weighing plate size C: , KERN DS-A03
- External data interface RS-232, Interface cable included, KERN YKUP-01
- External data interface USB, Interface cable included, KERN YKUP-03
- Extension-Box, KERN YKUP-13
- 6 Set for underfloor weighing, consists of platform, bow, hook, only for models with weighing plate B, KERN DS-A01
- Further details, plenty of further accessories and suitable printers see *Accessories*

STANDARD

CAL EXT | KUP | KCP PROTOCOL | GLP PRINTER | PCS | TOL | B MULTI | DMS | 1 DAY

OPTION

ET | RS 232 | USB | UNDER | DAkkS +3 DAYS
B

Model	Weighing capacity [Max]	Readability [d]	Smallest part weight [Normal]	Counting resolution	Net weight approx.	Cable length approx.	Weighing plate	Option DAkkS Calibr. Certificate DAkkS
KERN	kg	g	g/piece	Points	kg	m		KERN
CDS 4K0.02	4	0,02	0,2	200.000	6	2	A	963-127
CDS 15K0.05	15	0,05	0,5	300.000	8	2	B	963-128
CDS 16K0.1	16	0,1	1	160.000	8	2	B	963-128
CDS 30K0.1	30	0,1	1	300.000	8	2	B	963-128
CDS 30K0.1L	30	0,1	1	300.000	10	0,6	C	963-128
CDS 36K0.2L	36	0,2	2	180.000	10	0,6	C	963-128
CDS 60K0.2	60	0,2	2	300.000	10	0,6	C	963-129

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 and other digital systems

GLP/ISO log:
The balance displays weight, date and time, independent of a printer connection

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