# **KERN BALANCES & TEST SERVICES CATALOGUE 2019**

# Crane scale KERN HCD



# High-resolution hanging scale for loads up to 300 kg

## Features

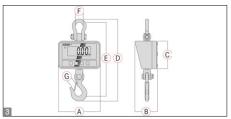
- NEW: Fully-equipped crane scale for low to medium load ranges. The solid design guarantees that extra level of safety (TÜV tested). Thanks to the large LCD display and the remote control which is delivered as standard, it can also be operated safely from a distance and results can be read off
- With the TÜV certification mark, the scale meets the requirements of the standard EN 13155 (Non-fixed load lifting attachments/ Breakage resistance) and EN 61010-1 (Electrical safety)
- **High mobility:** thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)
- Hold function: When the weighing value remains unchanged the weight indicated on the display is automatically "frozen" until the Hold key is pressed

- **Tare:** Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed
- Batterie charge status indication visualised through LED
- Large high-contrast display that is easy to read
- Standby function: display automatically switched off a er 5 min without a change of load. Automatic activation with the touch of a key
- · Hook with safety catch, revolving
- Shackle and safety catch made of nickel-plated steel
- Infrared remote control standard. Range up to 20 m. All functions can be selected.
  W×D×H 65×24×100 mm. Batteries included









## **Technical data**

- · LCD display, digit height 28 mm
- Batteries included, 4×1.5 V AA, operating time up to 100 h  $\,$
- Precision: 0,2 % of [Max]
- Permissible ambient temperature 5 °C/35 °C

STANDARD OPTION

Model	Weighing	Readability	Net weight	Immediate Dimensions								Option	
	capacity											DAkkS Calibr. Certificate	
	[Max]	[d]	approx.	Α	B	С	D	E	F	G		DAkkS	
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	mm		KERN	
HCD 60K-2	60	20	0,85	194	79,3	97,7	276,5	246,5	26	23,5		963-129H	
HCD 100K-2	150	50	0,85	194	79,3	97,7	276,5	246,5	26	23,5		963-129H	
HCD 300K-1	300	100	0,85	194	79,3	97,7	276,5	246,5	26	23,5		963-129H	
Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d]													
HCD 100K-2D	60   150	20   50	0,85	194	79,3	97,7	276,5	246,5	26	23,5		963-129H	
HCD 300K-2D	150   300	50   100	0,85	194	79,3	97,7	276,5	246,5	26	23,5		963-129H	

## Datasheet\_HCD\_V1

KERN & SOHN GmbH · Ziegelei 1 · 72336 Balingen · Germany · Tel. +49 7433 9933-0 · Fax +49 7433 9933-146 · www.kern-sohn.com · info@kern-sohn.com

# **KERN BALANCES & TEST SERVICES CATALOGUE 2019**

KCP

PROTOCOL



## Pictograms

#### 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, complying with the 2014/31/EU standard.



• 6534 •

ALIBI

# 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 RS 485 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



# 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.

# Analogue interface:

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



ANALOG

## Interface for second balance: For direct connection of a second balance



Network interface: For connecting the scale to an Ethernet network



### Wireless data transfer:

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

\*The Bluetooth<sup>®</sup> 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.

## **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.

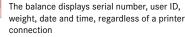
### Range of services:

- · 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

GLP/ISO log:



**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:

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

#### Recipe level A: 4

The weights of the recipe ingredients can be RECIPE 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

#### **Recipe level C: ∠**<sup>c</sup>



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



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

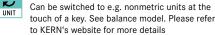


TOL

Percentage determination:

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

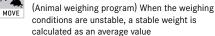
#### Weighing units: S

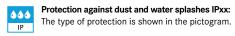


#### Weighing with tolerance range: ○ 3)

(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

#### M-Hold function:





#### 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; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS

### Mains adapter:

230V/50Hz in standard version for EU. On 230 V 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



SC TECH

Μ

+3 DAYS

DAkkS

+3 DAYS

1 DAY

2 DAYS

Your KERN specialist dealer:

### Weighing principle: Tuning fork: A resonating body is electromagnetically

excited, causing it to oscillate

#### s T compensation FORCE

accurate weighings

Verification possible:

Package shipment:

Pallet shipment:

DAkkS calibration possible:

shown in days in the pictogram

the pictogram

# Weighing principle: Electromagnetic force Coil inside a permanent magnet. For the most

Weighing principle: Single cell technology:

The time required for verification is specified in

Advanced version of the force compensation

principle with the highest level of precision

The time required for DAkkS calibration is

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