



Crane scale KERN HFD



Robust, high-resolution crane scale up to 12 t, now also with EC type approval [M] or protection type IP67



High mobility thanks to rechargeable battery operation, compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department etc.)



Solid shackles, non-revolving



Radio remote control standard. Range up to 20 m. All functions can be selected. W×D×H 65×24×100 mm. Batteries included, 1× 12 V 23A

KERN BALANCES & TEST SERVICES CATALOGUE 2021



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Features

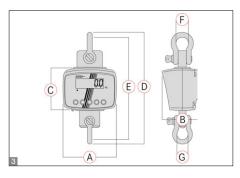
- The models with M add-on have EC type approval and because of this they are ideal for use in verified applications such as, for example, calculation of a total price, based on weight
- The models with IP add-on have special spray and dust protection to IP67 and because of this they are ideal for use in harsh environments
- 11 With the TÜV certification mark, the scales meet the requirements of the standard EN 13155 (Non-fixed load lifting attachments/ Breakage resistance) and EN 61010-1 (Electrical safety)
- · Because of its stable construction and robust design, it is ideal for continuous use in industrial environment
- · High mobility: thanks to rechargeable 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





Technical data

- Superior display size: digit height 30 mm, bright backlight for easy reading of weighing results, even in poor lighting conditions
- · Internal rechargeable battery pack, as standard, operating time up to 70 h without back light, charging time approx. 12 h. Battery pack accessible from the outside, which means it is easy to replace
- Precision: 0,2 % of [Max]
- Permissible ambient temperature -10 °C/40 °C



Accessories

- Internal rechargeable battery pack for load support, operating time up to 70 h without backlight, charging time approx. 12 h, KERN HFD-A04
- · Charging station for external battery charging, scope of delivery: charging station, exchangeable battery, mains adapter, KERN HFD-A07
- I Hook with safety catch, cast steel, galvanised and lacquered, non-revolving, suitable for models HFD 600, HFD 1T: KERN HFD-A01

HFD 3T: KERN HFD-A02 HFD 6T, HFD 10T: KERN HFD-A03

· Bluetooth data interface for wireless data transfer to PC or tablets, must be ordered at purchase, KERN HFD-A06

| Model | Weighing capacity | Readability | Net | 3 Dimensions | | | | | | | | | Option | |
|--|---------------------|--------------------|-------------|--------------|-------|-------|--------|--------|-------|--|--------------|--|---------------------------|--|
| | | | weight | | | | | | | | Verification | | DAkkS Calibr. Certificate | |
| | [Max] | [d] | approx. | Α | В | С | D | E | F = G | | MU | | DAkkS | |
| KERN | kg | g | kg | mm | mm | mm | mm | mm | mm | | KERN | | KERN | |
| Triple range balance switches automatically to the next largest weighing capacity [Max] and readibility [d] | | | | | | | | | | | | | | |
| HFD 600K-1 | 150 300 600 | 50 100 200 | 9 | 194 | 129 | 145 | 421 | 383 | 50,8 | | - | | 963-130H | |
| HFD 1T-4 | 300 600 1500 | 100 200 500 | 9 | 194 | 129 | 145 | 421 | 383 | 50,8 | | - | | 963-130H | |
| HFD 3T-3 | 600 1500 3000 | 200 500 1000 | 10 | 194 | 129 | 145 | 421 | 383 | 50,8 | | - | | 963-132H | |
| HFD 6T-3 | 1500 3000 6000 | 500 1000 2000 | 15 | 194 | 129 | 145 | 477 | 426 | 68,3 | | - | | 963-132H | |
| HFD 10T-3 | 3000 6000 12000 | 1000 2000 5000 | 20 | 194 | 129 | 145 | 573 | 510 | 82,5 | | - | | 963-133H | |
| | | Protect | tion agains | t dust | and v | vater | splash | nes IP | 67 | | | | | |
| HFD 600K-1IP | 150 300 600 | 50 100 200 | 9 | 194 | 129 | 145 | 421 | 383 | 50,8 | | - | | 963-130H | |
| HFD 1T-4IP | 300 600 1500 | 100 200 500 | 9 | 194 | 129 | 145 | 421 | 383 | 50,8 | | - | | 963-130H | |
| HFD 3T-3IP | 600 1500 3000 | 200 500 1000 | 10 | 194 | 129 | 145 | 421 | 383 | 50,8 | | - | | 963-132H | |
| HFD 6T-3IP | 1500 3000 6000 | 500 1000 2000 | 15 | 194 | 129 | 145 | 477 | 426 | 68,3 | | - | | 963-132H | |
| HFD 10T-3IP | 3000 6000 12000 | 1000 2000 5000 | 20 | 194 | 129 | 145 | 573 | 510 | 82,5 | | - | | 963-133H | |
| 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. | | | | | | | | | | | | | | |
| HFD 600K-1M | 600 | 200 | 9 | 194 | | 145 | | 383 | | | 965-130H | | 963-130H | |
| HFD 1T-4M | 1500 | 500 | 9 | 194 | 129 | 145 | 421 | 383 | | | 965-130H | | 963-130H | |
| HFD 3T-3M | 3000 | 1000 | 10 | 194 | 129 | 145 | 421 | 383 | 50,8 | | 965-132H | | 963-132H | |
| HFD 6T-3M | 6000 | 2000 | 15 | 194 | 129 | 145 | 477 | 426 | 68,3 | | 965-132H | | 963-132H | |
| HFD 10T-3M | 12000 | 5000 | 20 | 194 | 129 | 145 | 573 | 510 | 82,5 | | 965-133H | | 963-133H | |

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KCP

PROTOCOL

GLP

INTERN

PRINTER

PCS

RECIPE

RECIPE

- 88'

SUM

PERCENT

C

UNIT

- → +<

TOL

^-

digital systems GLP/ISO log:

connection GLP/ISO log:

printers

Piece counting:

Recipe level A:

Recipe level B:

Totalising level A:

value (100 %)

Weighing units:

Hold function:

KERN Communication Protocol (KCP):

It is a standardized interface command set for

KERN balances and other instruments, which

devices featuring KCP are thus easily integrated

with computers, industrial controllers and other

The balance displays serial number, user ID,

With weight, date and time. Only with KERN

Reference quantities selectable. Display can

The weights of the recipe ingredients can

be added together and the total weight of

Internal memory for complete recipes with

The weights of similar items can be added

Determining the deviation in % from the target

Can be switched to e.g. nonmetric units at the

(Checkweighing) Upper and lower limiting can

be programmed individually, e.g. for sorting and

dosing. The process is supported by an audible

(Animal weighing program) When the weighing

conditions are unstable, a stable weight is calculated as an average value

or visual signal, see the relevant model

touch of a key. See balance model. Please refer

together and the total can be printed out

name and target value of the recipe ingredients.

be switched from piece to weight

the recipe can be printed out

User guidance through display

Percentage determination:

to KERN's website for more details

Weighing with tolerance range:

weight, date and time, regardless of a printer

allows retrieving and controlling all relevant parameters and functions of the device. KERN



Pictograms



Internal adjusting: Quick setting up of the balance's accuracy with



Adjusting program CAL:

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

internal adjusting weight (motordriven)



Easy Touch: Suitable for the connection, data transmission and control through PC, tablet or smartphone.



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

Data interface RS-232:

• 6550.• To connect the balance to a printer, PC or RS 232 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





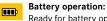
water splashes IPxx: The type of protection is shown in the pictogram

Protection against dust and

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UNDER the balance

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Ready for battery operation. The battery type

Suspended weighing:



is specified for each device

Load support with hook on the underside of



Rechargeable battery pack: Rechargeable set

Universal mains adapter:

with universal input and optional input socket MULTI 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. 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



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



The time required for verification is specified +3 DAYS in the pictogram

DAkkS calibration possible (DKD): DAkkS The time required for DAkkS calibration is +3 DAYS 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:



Your KERN specialist dealer:

The time required for internal shipping preparations is shown in days in the pictogram

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, EN, FR, IT, ES, NL, PL
- · Conformity evaluation and reverification of balances and test weights