



Compact crane scale for use in harsh environmental conditions or where space is limited, with convenient hand-held terminal

Features

- **1** 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)
- With its high-quality finish, low weight and compact dimensions, this crane scale (tensile force gauge) is an essential device for industrial use, on building sites, in freight centres, ports etc.
- Because of its compact design it is also ideally suited for installation in systems where space is limited, etc.
- **Peak load display** (peak hold)
- **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

- **2 Display device with integrated radio module**, which the user can carry around with him, thanks to the convenient hand strap **3**, standard. In this way the weighing data can always be read off the display device by the user, even when the user is a long way from the load receptor (force gauge) or under poor lighting conditions. Range up to 100 m, LCD display, digit height 23 mm, rechargeable battery pack internal, standard. Operating time up to 30 h without backlight, charging time approx. 12 h. Can be reordered, KERN HFC-A01
- Dimensions housing (display device) B×T×H 88×64×256 mm
- Net weight approx. 0,5 kg

Technical data

- Large backlit LCD display, digit height 23 mm
- Material and design of housing/load support, models with [Max] ≤ 3 t: aluminium/stainless steel bearing [Max] > 3 t: steel/steel

- Optional battery operation, 3×1.5 V AA not included, operating time up to 40 h
- Precision: 0,2% of [Max]
- Measuring frequency 60 Hz
- Further weighing units: kg, lb, N
- Permissible ambient temperature 5 °C/35 °C

Accessories

- **4 Rechargeable battery pack internal** for load support, operating time up to 30 h, without backlight, charging time approx. 12 h, KERN HFA-A01
- **5 High-strength shackle**, hot-dipped galvanised cast steel bracket, bow shaped. Scope of delivery: 2 shackles with lacquered screw bolts, suitable for models with [Max] ≤ 5t: KERN YSC-01 [Max] > 5t: KERN YSC-02
- **6 Hook with safety catch**, cast steel, galvanised and lacquered, non-revolving. Scope of delivery: 2 shackles, 1 lacquered screw bolt, 1 hook, suitable for models with [Max] ≤ 1t: KERN YHA-01 [Max] = 3t: KERN YHA-02 [Max] = 5t: KERN YHA-03 [Max] > 5t: KERN YHA-04

STANDARD

CAL EXT	UNIT	BATT	ACCU	MULTI	DMS	1 DAY

load receptors only **2**

OPTION

ACCU	DAKKS
+3 DAYS 4	

Model	Weighing range [Max] kg	Readout [d] g	Net weight approx. kg	7 Dimensions							Option	
				A	B	C	D	E	F=G	H=I	DAKKS Calibr. Certificate	
				mm	mm	mm	mm	mm	mm	mm	DKD	
KERN HFC 600K-1	600	200	1,8	90	55	100	255	165	27	30	963-130H	
HFC 1T-4	1000	500	1,8	90	55	100	255	165	27	30	963-130H	
HFC 3T-3	3000	1000	2,2	90	61	100	255	165	27	30	963-132H	
HFC 5T-3	5000	2000	4	90	61	100	255	165	30	30	963-132H	
HFC 10T-3	10000	5000	6	90	71	100	275	185	40	40	963-133H	

KERN Pictograms

 Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)	 GLP/ISO log: The balance displays serial number, user ID, weight, date and time, regardless of a printer connection	 Suspended weighing: Load support with hook on the underside of the balance
 Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required	 GLP/ISO log: With weight, date and time. Only with KERN printers	 Battery operation: Ready for battery operation. The battery type is specified for each device
 Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	 Piece counting: Reference quantities selectable. Display can be switched from piece to weight	 Rechargeable battery pack: Rechargeable set
 Alibi memory: Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.	 Recipe level A: The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out	 Universal mains adapter: with universal input and optional input socket adapters for A) EU, GB B) EU, GB, CH, USA C) EU, GB, CH, USA, AUS
 Data interface RS-232: To connect the balance to a printer, PC or network	 Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display	 Mains adapter: 230V/50Hz in standard version for EU. On request GB, USA or AUS version available
 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	 Recipe level C: 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	 Power supply: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
 USB data interface: To connect the balance to a printer, PC or other peripherals	 Totalising level A: The weights of similar items can be added together and the total can be printed out	 Weighing principle: Strain gauges Electrical resistor on an elastic deforming body
 Bluetooth* data interface: To transfer data from the balance to a printer, PC or other peripherals	 Percentage determination: Determining the deviation in % from the target value (100 %)	 Weighing principle: Tuning fork A resonating body is electromagnetically excited, causing it to oscillate
 WLAN data interface: To transfer data from the balance to a printer, PC or other peripherals	 Weighing units: Can be switched to e.g. nonmetric units at the touch of a key. See balance model. Please refer to KERN's website for more details	 Weighing principle: Electromagnetic force compensation Coil inside a permanent magnet. For the most accurate weighings
 Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.	 Weighing with tolerance range: (Check-weighing) 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	 Weighing principle: Single cell technology Advanced version of the force compensation principle with the highest level of precision
 Interface for second balance: For direct connection of a second balance	 Hold function: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value	 Verification possible: The time required for verification is specified in the pictogram +3 DAYS
 Network interface: For connecting the scale to an Ethernet network	 Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram.	 DAkkS calibration possible (DKD): The time required for DAkkS calibration is shown in days in the pictogram +3 DAYS
 Wireless data transfer: between the weighing unit and the evaluation unit using an integrated radio module	 Stainless steel: The balance is protected against corrosion	 Package shipment: The time required for internal shipping preparations is shown in days in the pictogram 1 DAY
 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		 Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram 2 DAYS

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 best-equipped 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

Your KERN specialist dealer: