

## HANGING SCALES/CRANE SCALES



### **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



#### Easy Touch:

Suitable for the connection, data transmission and control through PC, tablet or smartphone. For details see page 131



#### 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. For details see page 223



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:





**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 serial number, INTERN user ID, weight, date and time, regardless of a printer connection

#### GLP/ISO log: GLP

With weight, date and time. Only with PRINTER KERN printers, see page 170-172



**Piece counting:** Reference quantities selectable. Display can be switched from piece to weight



The weights of the recipe ingredients RECIPE can be added together and the total weight of the recipe can be printed out

with name and target value of the

recipe ingredients. User guidance

#### Recipe level B: Internal memory for complete recipes

through display



**Totalising level A:** The weights of similar items can be SUM 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 at the touch of a key. 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





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



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Protection against dust and water splashes IPxx: The type of protection is shown in the

pictogram. For details see page 58



#### Suspended weighing:

Load support with hook on the underside of the balance



Ready for battery operation. The battery type is specified for each device



Rechargeable battery pack: Rechargeable set



Universal mains adapter:

with universal input and optional input socket adapters for A) EU, CH, GB B) EU, CH, GB, USA C) EU, CH, GB, USA, AUS



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

DMS

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

	-
N	S
FO	RCE

#### 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



1 DAY

Ē

2 DAYS

Factory calibration (ISO):

Package shipment:

Pallet shipment:

pictogram

pictogram

The time required for Factory calibration is shown in days in the pictogram

The time required for internal shipping

The time required for internal shipping

preparations is shown in days in the

preparations is shown in days in the

## KERN – measuring technology and testing services from a single source



#### Your advantages

#### fast

- · 24 hours delivery service for products in stock - ordered today, on its way tomorrow
- Sales & service hotline available from 8:00 am to 6:00 pm

#### reliable

- Up to 3 years warranty
- Precision in weighing technology for more than 175 years

#### competent

- DAkkS accreditation DIN EN ISO/IEC 17025
- Certified QM system DIN EN ISO 9001
- · Authorisation for initial verification by the manufacturer 2014/31/EU
- Medical certifications DIN EN ISO 13485 and 93/42/EWG

#### versatile

- One-stop shopping: from pocket balances through to 12 t crane balance - everything from one supplier
- Find the product you want at lightning speed with the "Balance Quick-Finder" at www.kern-sohn.com

#### **Order hotline** +49 7433 9933-0



Service hotline +49 7433 9933-199



**Calibration hotline** +49 7433 9933-196

Our team of consultants will assist you from Monday to Friday from 8:00 am to 6:00 pm





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#### www.kern-sohn.com

i Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary, images and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a clever test weight and balance search engine.

## Hanging scales/Crane scales

#### TÜV-tested safety

KERN puts great emphasis on safety. For your safety, all KERN hanging and crane scales are subject to a stringent load test in accordance with EN 13155 and (Non-fixed load lifting attachments/breakage resistance) and EN 61010-1 (Electrical safety).

As well as the classic crane scales, we also have electronic tensile dynamometers which are extremely versatile thanks to their stable, compact construction. They can, for example, be fitted into testing machines, used for checking for overload, for bracing and tensile force measurement, etc.

This type of device is ideally suited for use between shackles or with a test bench. This is where the benefit of this construction comes to the fore, as the tensile force can be applied in both directions. These compact crane scales are also particularly suitable when weighing suspended loads where space is tight.

At the core of this construction is a robust load cell. Through the absence of moving parts, these scales are practical in maintenance and wear free.

## ! Note

DAkkS calibration and conformity evaluation for crane scales up to 12 t



Do you use your crane scales in ISO-certified processes or where verification is mandatory? Then we can produce the right calibration certificate or the relevant Declaration of Conformity for your measuring device. Thanks to a modern crane scale test unit, we can calibrate or verify crane scales and force-measuring devices from any manufacturer to a maximum load of up to 12 t or 120 kN. You can find all the important details on pages 214, 219 or directly from one of our test service specialists, we will be pleased to help you.

## **KERN HFD**

Page 165

- Triple-range scale: Ideal, when high maximum loads need to be weighed, but in the lower load range you still need high resolution. This means that three balances can be replaced with one – which saves space and money!
- Also available with high protection type IP67!
- Also EC type approval as version with calibration approval !



Readability	Weighing capacity	Model	Price excl. of VAT	Page		Μ	Ĩ		^-	666		
[d]	[Max]		ex works		DAYS		CAL EXT	RS 232	MOVE	IP	BATT	ACCU
٧g	kg	KERN	€			For a	n explana	tion on t	he pictos	, see fron	t flap	
0,005	5	HDB 5K5N	<u>60,-</u>	157	1		•		•		•	
0,005	6	HDB 6K-3XL	85,-	158	1		•		•		•	
0,01	10	HDB 10K10N HDB 10K-2XL	60,- 85,-	157 158	1		•		•		•	
0,01	20	HCB 20K10	105,-	158	1		•		•			
0,01	50	HGA 50K-2S05	80,-*	155	1		•				•	
0,02	15	CH 15K20	69,-	156	1		•		•		•	
0,02	30	HDB 30K-2XL	85,-	158	1		•		•		•	
0,02	50	HCB 50K20	115,-	159	1		•		•		•	
0,02	60	HCD 60K-2	195,-	161	1		•				•	•
0,02   0,05	60   150	HCD 100K-2D	205,-	161	1		•				•	•
0,05	50	CH 50K50	75,-	156 159	1		•		•		•	
0,05	99 150	HCB 99K50 HCD 100K-2	<u> </u>	161	1		•		•		•	•
0,05	150	HFB 150K50	345,-	164	1		•					
0,05   0,1	150   300	HCD 300K-2D	205,-	161	1		•				•	•
0,05   0,1   0,2	150   300   600	HFD 600K-1	370,-	165	1		•			•		•
0,05   0,1   0,2	150   300   600	HFD 600K-1IP	570,-	165	1		٠			•		•
0,1	50	CH 50K100	65,-	156	1		•		•		•	
0,1	50	HCB 50K100	90,-	159	1		•		•		•	
0,1	50	HCN 50K100IP	130,-	160	1		•		•	•	•	
0,1	200	HCB 200K100	115,-	159	1		•		•		•	
0,1	300 300	HCD 300K-1 HFB 300K100	195,- 375,-	161 164	1		•				•	•
0,1	1000	HFM 1T0.1	<u> </u>	167	1		•					
0,1   0,2   0,5	300   600   1500	HFD 1T-4	380,-	165	1		•			•		•
0,1   0,2   0,5	300   600   1500	HFD 1T-4IP	580,-	165	1		•			•		•
0,2	100	HCB 100K200	99,-	159	1		٠		٠		•	
0,2	100	HCN 100K200IP	130,-	160	1		٠		•	•	•	
0,2	600	HFA 600K-1	560,-	163	1		•				•	•
0,2	600	HFC 600K-1	890,-	163	1		•				•	•
0,2	600	HFB 600K200	375,-	164	1		•					•
0,2	600 600   1500   3000	HFD 600K-1M HFD 3T-3	480,-	165 165	1	0	•			•		•
0,2   0,5   1	600   1500   3000	HFD 3T-3IP	<u> </u>	165	1		•					
0,2   0,0   1	200	HCB 200K500	95,-	159	1		•		•	-	•	
0,5	200	HCN 200K500IP	130,-	160	1		•		•	•	•	
0,5	1000	HFA 1T-4	580,-	163	1		٠				•	•
0,5	1000	HFC 1T-4	890,-	163	1		۲				•	•
0,5		HFD 1T-4M	480,-	165	1	0	•			•		•
0,5		HFO 1.5T0.5M	1030,-	168	1	0	•					•
0,5		HFM 3T0.5	710,-	167	1		•					•
0,5	5000	HFM 5T0.5 HFD 6T-3	930,- 640,-	167 165	1		•			•		•
0,5   1   2		HFD 6T-3IP	840,-	165	1		•			•		
1	500	HCB 0.5T-3	190,-	159	1		•		•	-	•	
1	3000	HFA 3T-3	630,-	163	1		•				•	•
1	3000	HFC 3T-3	950,-	163	1		•				•	•
1		HFD 3T-3M	640,-	165	1	0	•			•		•
1		HFO 3T1M	1130,-	168	1	0	٠					•
1	10000	HFM 10T1	1260,-	167	2**		•					•
1   2   5	3000   6000   12000	HFD 10T-3	760,-	165	1		•			•		•
1   2   5		HFD 10T-3IP HCB 1T-3	960,- 250,-	165 159	1		•		•	•	•	•
2		нсь 11-3 НFA 5T-3	<u> </u>	163	1		•		-			•
2		HFC 5T-3	1020,-	163	1		•				•	•
2		HFD 6T-3M	790,-	165	1	0	•			•	-	•
2		HFO 6T2M	1400,-	168	2**	0	٠					•
5	10000	HFA 10T-3	1090,-	163	1		•				•	•
5	10000	HFC 10T-3	1410,-	163	1		•				•	•

Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs









Ultra compact, digital luggage scale for fast weighing of luggage and other suspended loads

#### Features

- This ergonomically-optimised luggage scale is perfectly suited for rapid, accurate checking of cases, bags, sports baggage, etc. The high maximum load means that there is sufficient safety reserve and can therefore also be used for weighing other, suspended loads
- Ergonomic design for easy handling
- Robust nylon fabric tape for secure fixing of the item to be weighed
- Simple and convenient 1-key operation
- Easy to toggle between units at the press of a button
- High mobility: thanks to battery operation, compact, lightweight construction, it is suitable for the use in several locations
- Automatic Hold function: When the weighing value remains unchanged the weight indicated on the display is automatically "frozen" for 10 sec. This leaves sufficient time to read the weight in peace

#### **Technical data**

- · LCD display, digit height 9 mm
- Ready for use: Batteries included, 3V CR2032, operating time up to 20 h, AUTO-OFF function to preserve the battery, Battery level indicator on display
- Note: The models are only delivered in a set of 5 units. i.e. the price given in the table refers to a delivery of 5 items. Cannot be delivered individually. The calibration prices given here refer to calibration of a single balance



Model	Weighing	Readability	Dimensions	Net weight/	Quantity	Price	Option		Quantity
	capacity		housing	balance	delivered	excl. of VAT	DAkkS Calibr. Ce	rtificate	delivered
	[Max]	[d]	W×D×H	approx.	(balances)	ex works	DAkkS		(DAkkS Calibr.
KERN	kg	g	mm	kg		€	KERN	€	Certificate)
HGA 50K-2S05	50	10	150×31×35	0,4	5	80,-*	963-128H	94,-	1



# The classic among manual hanging scales – perfect for rapid weighing of higher loads

#### Features

- 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)
- Ideal for rapid control in goods-in and goods-out
- Also essential in the private sector to determine the weight of fish, game, fruits, bicycle parts, suitcases etc.
- Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key
- Peak load display (peak hold)
- Hook, steel

#### **Technical data**

- LCD display, digit height 11 mm
- Tape measure, extractable, length approx. 100 cm
- Ready for use: Batteries included, 9 V block, operating time up to 20 h
- Further weighing units: kg, lb, N
- Permissible ambient temperature 5  $^{\circ}\text{C}/35$   $^{\circ}\text{C}$

#### Accessories

 I are pan with pan beam, details see Accessories, KERN CH-A01N, € 70,-

					OPTION
C	^				DAkks
UNIT	MOVE	BATT	DMS	1 DAY	+3 DAYS
		3	2 🔩 🚥		2 🔩 📼 🖬 🏎

Model	Weighing capacity	Readability	Dimensions housing	Net weight	Price	Option	
			W×D×H		excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]		approx.	ex works	DAkkS	
KERN	kg	g	mm	kg	€	KERN	€
CH 15K20	15	20	90×30×176,5	0,35	69,-	963-128H	94,-
CH 50K50	50	50	90×30×176,5	0,35	75,-	963-128H	94,-
CH 50K100	50	100	90×30×176,5	0,35	65,-	963-128H	94,-







## Practical hanging scale for rapid, mobile weighing

#### Features

- 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)
- Ideal for rapid control in goods-in and goods-out
- Also essential in the private sector to determine the weight of fish, game, fruits, bicycle parts, suitcases etc.
- Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key
- Hook, steel, can be hinged
- Peak load display (peak hold)

#### **Technical data**

- LCD display, digit height 12 mm
- Ready for use: Batteries included, 2×1.5 V AAA, operating time up to 180 h
- Further weighing units: kg, lb, N
- Permissible ambient temperature 5 °C/35 °C

#### Accessories

S)

• ■ Tare pan with pan beam, details see Accessories, KERN CH-A01N, € 70,-

STANDARD	OPTION					
CAL EXT		MOVE	BATT	DMS	1 DAY	DAkkS +3 DAYS

Model	Weighing capacity	Readability	Dimensions housing	Net weight	Price	Option	
			W×D×H		excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]		approx.	ex works	DAkkS	
KERN	kg	g	mm	kg	€	KERN	€
HDB 5K5N	5	5	72×25×105	0,20	60,-	963-127H	78,-
HDB 10K10N	10	10	72×25×105	0,20	60,-	963-128H	94,-



Hanging scale KERN HDB-XL



## User-friendly hanging scale for rapid, mobile weighing

#### Features

- The larger design creates space for a large handle, which enables even better handling especially with heavier loads
- 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)
- Ideal for rapid control in goods-in and goods-out
- Also essential in the private sector to determine the weight of fish, game, fruits, bicycle parts, suitcases etc.
- Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key
- Peak load display (peak hold)
- Hook, steel, can be hinged

#### **Technical data**

- LCD display, digit height 12 mm
- Ready for use: Batteries included,  $2{\times}1.5$  V AAA, operating time up to 180 h
- Further weighing units: kg, lb, N
- Permissible ambient temperature 5  $^\circ\text{C}/35$   $^\circ\text{C}$

#### Accessories

 I are pan with pan beam, details see Accessories, KERN CH-A01N, € 70,-

					OPTION
C	^				DAkks
UNIT	MOVE	BATT	DMS	1 DAY	+3 DAYS
	R	K 🐪	K 🖓 🛄		

Model	Weighing capacity	Readability	Dimensions housing	Net weight	Price	Option	
			W×D×H		excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]		approx.	ex works	DAkkS	
KERN	kg	g	mm	kg	€	KERN	€
HDB 6K-3XL	6	5	107×25×101	0,20	85,-	963-128H	94,-
HDB 10K-2XL	15	10	107×25×101	0,20	85,-	963-128H	94,-
HDB 30K-2XL	30	20	107×25×101	0,20	85,-	963-128H	94,-







## Handy hanging scale for higher loads

#### Features

- 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)
- · Ideal for rapid control in goods-in and goods-out
- Also essential in the private sector to determine the weight of fish, game, fruits, bicycle parts, suitcases etc.
- Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key
- Peak load display (peak hold), Measuring frequency 5 Hz[Max] ≤ 200 kg: Snap link (stainless steel) with safety catch, as standard [Max] ≤ 200 kg: Hook (stainless steel) with safety catch
- [Max] ≥ 0,5 t: Reinforced version for heavy loads. Snap link and Hook not included

-	TANDAR						OFTION	
		$\mathcal{C}$	^-–	<b></b>			DAkkS	
F	CAL EXT	UNIT	MOVE	BATT	DMS	1 DAY	+3 DAYS	l

#### Technical data

- · LCD display, digit height 12 mm
- Hole diameter of load support, model with [Max] ≤ 200 kg: approx. 14 mm
   [Max] > 200 kg: approx. 16 mm
- Ready for use: Batteries included, 3×1.5 V AA, operating time up to 300 h









#### Accessories

#### for models with [Max] ≤ 20 kg

 Tare pan with pan beam, details see Accessories, KERN CH-A01N, € 70,-

#### for models with [Max] ≥ 100 kg

 I Hook with safety catch, cast steel, galvanised and lacquered, revolving. Scope of delivery: 2 shackles, 1 lacquered screw bolt, 1 hook, KERN YHA-06, € 125,-

#### for models with [Max] ≤ 200 kg

- Snap link (stainless steel) with safety catch, standard, opening approx. 15 mm, KERN HCB-A01, € 33,-
- Hook (stainless steel), standard, opening approx. 25 mm, KERN HCB-A02, € 30,-

#### for models with $[Max] \ge 0.5 t$

■ High-strength shackle, hot-dipped galvanised cast steel bracket, bow shaped. Scope of delivery: 2 shackles with lacquered screw bolts, suitable for models KERN HCB with [Max] ≥ 0,5 t, KERN YSC-03, € 50,-

Model	Weighing capacity	Readability	Dimensions housing	Net weight	Price	Option	
			W×D×H		excl. of VAT	DAkkS Calibr. Ce	ertificate
	[Max]	[d]		approx.	ex works	DAkkS	
KERN	kg	g	mm	kg	€	KERN	€
HCB 20K10	20	10	82×43×153	0,30	105,-	963-128H	94,-
HCB 50K20	50	20	82×43×153	0,30	115,-	963-128H	94,-
HCB 50K100	50	100	82×43×153	0,30	90,-	963-128H	94,-
HCB 99K50	99	50	82×43×153	0,30	100,-	963-129H	110,-
HCB 100K200	100	200	82×43×153	0,30	99,-	963-129H	110,-
HCB 200K100	200	100	82×43×153	0,30	115,-	963-129H	110,-
HCB 200K500	200	500	82×43×153	0,30	95,-	963-129H	110,-
HCB 0.5T-3	500	1000	82×43×153	0,40	190,-	963-130H	200,-
HCB 1T-3	1000	2000	82×43×153	0,40	250,-	963-130H	200,-













## Robust, compact hanging scale with high level of protection against dust and water spray

#### Features

- 🛽 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)
- · Housing stainless Steel, IP65-protected against dust and water splashes
- · Ideal for rapid control in goods-in and goods-out
- · Also essential in the private sector to determine the weight of fish, game, fruits, bicycle parts, suitcases etc.
- · Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key
- · Peak load display (peak hold), Measuring frequency 5 Hz
- · Snap link (stainless steel) with safety catch, as standard
- · Hook (stainless steel) as standard

15

#### **Technical data**

- · LCD display, digit height 12 mm
- · Hole diameter of load support, model with  $[Max] \le 200 \text{ kg: approx. } 14 \text{ mm}$ [Max] > 200 kg: approx. 16 mm
- I Second display on the rear of the balance
- Ready for use: Batteries included, 2×1.5 V AA, operating time up to 200 h

#### Accessories

#### for models with [Max] ≥ 100 kg

- **I** Hook with safety catch, cast steel, galvanised and lacquered, revolving. Scope of delivery: 2 shackles, 1 lacquered screw bolt, 1 hook, KERN YHA-06, € 125,-
- · Snap link (stainless steel) with safety catch, standard, opening approx. 15 mm, KERN HCB-A01, € 33,-
- Hook (stainless steel), opening approx. 25 mm, KERN HCB-A02, € 30,-

STANDARD							OPTION
	C	^-	666			<b>.</b>	DAkkS
CAL EXT	UNIT	MOVE	IP 65	BATT	DMS	1 DAY	+3 DAYS

Model	Weighing capacity Readability		Dimensions housing	Net weight	Price	Option	
			W×D×H		excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]		approx.	ex works	DAkkS	
KERN	kg	g	mm	kg	€	KERN	€
HCN 50K100IP	50	100	96×48×179	0,50	130,-	963-128H	94,-
HCN 100K200IP	100	200	96×48×179	0,50	130,-	963-129H	110,-
HCN 200K500IP	200	500	96×48×179	0,50	130,-	963-129H	110,-



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

#### Features

- 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 level of mobility: thanks to battery pack operation, compact construction and low weight, it is suitable for use in several locations (production, warehouse, dispatch department, etc.)
- Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key

STANDARD	)				OPTION	
	$\mathcal{C}$					DAkks
CAL EXT	UNIT	BATT	DMS	1 DAY	ACCU	+3 DAYS

- Tare: Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed
- Battery level indicator, LED visual display
- Large high-contrast display that is easy to read
- Standby function: display automatically switched off after 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**

- Backlit LCD display digit height 28 mm
- Ready for use: Batteries included, 4×1.5 V AA, operating time up to 100 h
- Precision: 0,2 % of [Max]
- Permissible ambient temperature 5 °C/40 °C

#### Accessories

 Internal rechargeable battery pack for Load lifting attachments, operating time up to 50 h without backlight, charging time approx. 12 h, KERN HCD-A01, € 50,-

Model	Weighing	Readability	Net weight			3	Dimensio		Price	Option			
	capacity										excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]	approx.	А	В	С	ex works	DAkkS					
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	mm	€	KERN	€
HCD 60K-2	60	20	1,10	150	79	97	276	250	26	18	195,-	963-129H	110,-
HCD 100K-2	150	50	1,10	150	79	97	276	250	26	18	195,-	963-129H	110,-
HCD 300K-1	300	100	1,10	150	79	97	276	250	26	18	195,-	963-129H	110,-
	Du	al-range bala	nce switches	automat	ically to th	ne next lar	gest weig	hing capa	city [Max]	and read	ibility [d]		
HCD 100K-2D	60   150	20   50	1,10	150	79	97	276	250	26	18	205,-	963-129H	110,-
HCD 300K-2D	150   300	50   100	1,10	150	150 79 97 276 250 26 18							963-129H	110,-



### Compact crane scale with integrated display can also be used for tensile force measurement

#### Features

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- 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.
- Ideally suited for determining weight quickly while loading and unloading
- Peak load display (peak hold)
- Hold function: For easy reading of the weighing result, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key
- Tare: Resets the display to "0" when there is a load on the scale. Now removed or added loads are directly displayed

STANDARD	JANDARD												
Ĩ	C						DAkkS						
CAL EXT	UNIT	BATT	ACCU	MULTI	DMS	1 DAY	+3 DAYS						

#### **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
- Internal rechargeable battery pack, operating time up to 30 h without backlight, charging time approx. 12 h
- Optional battery operation, 3×1.5 V AA not included in scope of delivery, 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

- Image: Provide the state of th
- [Max] > 5 t: KERN YSC-02, € 210,-
- B 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] ≤ 1 t: KERN YHA-01, € 170,-
- [Max] = 3 t: KERN YHA-02, € 190,-
- [Max] = 5 t: KERN YHA-03, € 230,-
- [Max] > 5 t: KERN YHA-04, € 410,-

Model	Weighing capacity	-	Net weight		4	Dimensio	ons	Price excl. of VAT	Option DAkkS Calibr. Ce	ertificate	
	[Max]	[d]	approx.	Α	В	С	D	F	ex works	DAkkS	
KERN	kg	g	kg	mm	mm	mm	mm	mm	€	KERN	€
HFA 600K-1	600	200	1,8	90	55	100	255	27	560,-	963-130H	200,-
HFA 1T-4	1000	500	1,8	90	55	100	255	27	580,-	963-130H	200,-
HFA 3T-3	3000	1000	2,0	90	61	100	255	27	630,-	963-132H	500,-
HFA 5T-3	5000	2000	4,0	90	61	100	255	30	690,-	963-132H	500,-
HFA 10T-3	10000	5000	6	90	71	100	275	40	1090,-	963-133H	700,-



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

#### Features

- 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
- I Display device with integrated radio module, which the user can carry around with him, thanks to the convenient hand strap I, 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 20 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, € 60,-
- Dimensions of display device W×D×H 85×64×256 mm
- Net weight 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 in scope of delivery, operating time up to 40 h
- Precision: 0,2 % of [Max]
- Measuring frequency 10 Hz
- Further weighing units: kg, lb, N
- Permissible ambient temperature 5 °C/35 °C

#### Accessories

- Internal rechargeable battery pack for load support, operating time up to 30 h, without backlight, charging time approx. 12 h
- I 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, € 100,[Max] > 5t: KERN YSC-02, € 210,-
- If 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, € 170,-[Max] = 3t: KERN YHA-02, € 190,-[Max] = 5t: KERN YHA-03, € 230,-[Max] > 5t: KERN YHA-04, € 410,-

STANDARD			OPTION					
CAL EXT	Ĉ							DAkkS +3 DAYS
LALEXI	UNIT	BATT load receptors only	ACCU 2	MULT	DMS	1 DAY	4	+3 DATS

,											
Model	Weighing capacity	Readability	Net weight	Net weight			ons	Price	Option		
								excl. of VAT	DAkkS Calibr. Ce	ertificate	
	[Max]	[d]	approx.	A	В	С	D	F	ex works	DAkkS	
KERN	kg	g	kg	mm	mm	mm	mm	mm	€	KERN	€
HFC 600K-1	600	200	1,8	90	55	100	255	27	890,-	963-130H	200,-
HFC 1T-4	1000	500	1,8	90	55	100	255	27	890,-	963-130H	200,-
HFC 3T-3	3000	1000	2,2	90	61	100	255	27	950,-	963-132H	500,-
HFC 5T-3	5000	2000	4,0	90	61	100	255	30	1020,-	963-132H	500,-
HFC 10T-3	10000	5000	6	90	71	100	275	40	1410,-	963-133H	700,-



## SUD Production monitored Type tested





# The professional alternative up to 600 kg with rear-facing second display

#### Features

- 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)
- 2 Second display on the rear of the balance
- 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
- Hook with safety catch, revolving
- Shackle and safety catch made of nickel-plated steel

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 I Radio remote control standard. Range up to 20 m. All functions can be selected (excl. ON/OFF). W×D×H 48×10×95 mm. Batteries included, 2×1.5 V AAA



#### **Technical data**

- Superior display size: digit height 25 mm, bright backlight for easy reading of weighing results, even in poor lighting conditions
- Internal rechargeable battery pack, operating time up to 30 h without backlight, charging time approx. 14 h
- Precision: 0,2% of [Max]
- Permissible ambient temperature 0  $^{\circ}\text{C}/\text{40}$   $^{\circ}\text{C}$

Model	Weighing	Readability	Net weight			4	Dimensio		Price	Option			
	capacity										excl. of VAT	DAkkS Calibr. Ce	rtificate
	[Max]	[d]	approx.	А	В	С	D	ex works	DAkkS				
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	mm	€	KERN	€
HFB 150K50	150	50	2,2	163	126	158,5	415	385	26	25	345,-	963-129H	110,-
HFB 300K100	300	100	2,2	163	126	158,5	415	385	26	25	375,-	963-129H	110,-
HFB 600K200	600	200	2,4	163	126	158,5	415	25	375,-	963-130H	200,-		



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



#### 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
- 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, € 110,-
- Charging station for external battery charging, scope of delivery: charging station, exchangeable battery, mains adapter, KERN HFD-A07, € 110,-
- Isook with safety catch, cast steel, galvanised and lacquered, non-revolving, suitable for models

HFD 600, HFD 1T: KERN HFD-A01, € 45,-HFD 3T: KERN HFD-A02, € 60,-HFD 6T, HFD 10T: KERN HFD-A03, € 100,-

Bluetooth data interface for wireless data transfer to PC or tablets, must be ordered at purchase, KERN HFD-A06, € 210,-

Model	Weighing capacity	Readability	Net	3 Dimensions			Price	Option						
			weight							excl. of VAT	Verifica	tion	DAkkS Calibr. Cer	rtificate
	[Max]	[d]	approx.	Α	В	C	D	E	F = G	-	MШ		DAkkS	
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	€	KERN	€	KERN	€
	Triple range	balance switches autor	natically to	the n	iext la	irgest	weigh	ing ca	apacity	[Max] and re	adibility [d]			
HFD 600K-1	150   300   600	50   100   200	9	194	129	145	421	383	50,8	370,-	-	-	963-130H	200,-
HFD 1T-4	300   600   1500	100   200   500	9	194	129	145	421	383	50,8	380,-	-	-	963-130H	200,-
HFD 3T-3	600   1500   3000	200   500   1000	10	194	129	145	421	383	50,8	590,-	-	-	963-132H	500,-
HFD 6T-3	1500   3000   6000	500   1000   2000	15	194	129	145	477	426	68,3	640,-	-	-	963-132H	500,-
HFD 10T-3	3000   6000   12000	1000   2000   5000	20	194	129	145	573	510	82,5	760,-	-	-	963-133H	700,-
		Protect	tion agains	t dust	and v	water	splasł	nes IP	67					
HFD 600K-1IP	150   300   600	50   100   200	9	194	129	145	421	383	50,8	570,-	-	-	963-130H	200,-
HFD 1T-4IP	300   600   1500	100   200   500	9	194	129	145	421	383	50,8	580,-	-	-	963-130H	200,-
HFD 3T-3IP	600   1500   3000	200   500   1000	10	194	129	145	421	383	50,8	790,-	-	-	963-132H	500,-
HFD 6T-3IP	1500   3000   6000	500   1000   2000	15	194	129	145	477	426	68,3	840,-	-	-	963-132H	500,-
HFD 10T-3IP	3000   6000   12000	1000   2000   5000	20	194	129	145	573	510	82,5	960,-	-	-	963-133H	700,-
Not	e: For applications that	equire verification, plea	se order ve	erifica	tion a	t the s	same	time, i	initial v	erification at	a later date	e is not	possible.	
		Verification at the facto	ry, we need	d to kr	now tł	ne full	addre	ess of	the loc	ation of use.				
HFD 600K-1M	600	200	9	194	129	145	421	383	50,8	480,-	965-130H	132,-	963-130H	200,-
HFD 1T-4M	1500	500	9	194	129	145	421	383	50,8	480,-	965-130H	132,-	963-130H	200,-
HFD 3T-3M	3000	1000	10	194	129	145	421	383	50,8	640,-	965-132H	200,-	963-132H	500,-
HFD 6T-3M	6000	2000	15	194	129	145	477	426	68,3	790,-	965-132H	200,-	963-132H	500,-
HFD 10T-3M	12000	5000	20	194	129	145	573	510	82,5	900,-	965-133H	300,-	963-133H	700,-



# Robust industrial crane scale with bright LED display for optimum reading in unfavourable ambient conditions

#### Features

- 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)
- Professional device for robust applications in production, quality control, logistics etc. 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.)

- Adaptation to unstable environmental conditions by changing the readability
- 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
- Hook with safety catch, revolving
- Radio remote control standard. Range up to 20 m. All functions can be selected (excl. ON/OFF). W×D×H 48×10×95 mm. Batteries included, 2×1.5 V AAA

## Technical data

- Superior display size: digit height 30 mm, bright with high contrast for easy reading of weighing results, even in poor lighting conditions
- Internal rechargeable battery pack, operating time up to 50 h without backlight, charging time approx. 14 h
- Precision: 0,2 % of [Max]
- Permissible ambient temperature 0 °C/40 °C

STANDARD	STANDARD											
	<b>III</b> )			<b>F</b>	<b></b> )	DAkk						
CAL EXT	ACCU	MULTI	DMS	1 DAY	2 DAYS	+3 DAYS						
					4							

Model	Weighing	Readability	Net weight			3	Dimensio	Price					
	capacity							excl. of VAT	DAkkS Calibr. Ce	ertificate			
	[Max]	[d]	approx.	А	В	С	D	E	F	G	ex works	DAkkS	
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	mm	€	KERN	€
HFM 1T0.1	1000	100	14	270	200	175	610	540	68	40	690,-	963-130H	200,-
HFM 3T0.5	3000	500	16	270	200	175	610	540	74	40	710,-	963-132H	500,-
HFM 5T0.5	5000	500	24	300	230	190	730	650	74	55	930,-	963-132H	500,-
HFM 10T1 4	10000	1000	34	300	230	190	840	750	92	60	1260,-	963-133H	700,-







Robust industrial crane scale with EC type approval [M] – perfect for high-capacity applications which require verification

#### Features

- 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)
- Professional device for robust applications in production, quality control, logistics etc. 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.)
- Adaptation to unstable environmental conditions by changing the readability

- High resolution readability: Readability [d] for 5 sec increased by one decimal place at the touch of a key, only for models with EC type approval
- 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
- Hook with safety catch, revolving
- Radio remote control standard. Range up to 20 m. All functions can be selected (excl. ON/OFF). W×D×H 48×10×95 mm. Batteries included, 2×1.5 V AAA





#### **Technical data**

- Superior display size: digit height 30 mm, bright with high contrast for easy reading of weighing results, even in poor lighting conditions
- Internal rechargeable battery pack, as standard, operating time up to 50 h without back light, charging time approx. 14 h
- Precision: 0, 2 % of [Max]
- Permissible ambient temperature 0 °C/40 °C

STANDARD	)				OPTION	FACTORY
CAL EXT	ACCU	A H MULTI	DMS	1 DAY	DAkkS +3 DAYS	H3 DAYS

Model	Weighing	Readability	Net weight	3 Dimensions							Price		Option			
	capacity										excl. of VAT	Verification		DAkkS Calibr. Certificate		
	[Max]	[d]	approx.	Α	В	С	D	E	F	G	ex works	MIII		DAkkS		
KERN	kg	g	kg	mm	mm	mm	mm	mm	mm	mm	€	KERN	€	KERN	€	
HFO 1.5T0.5M	1500	500	16	270	200	175	610	540	60	35	1030,-	965-130H	132,-	963-130H	200,-	
HFO 3T1M	3000	1000	17	270	200	175	610	540	80	47	1130,-	965-132H	200,-	963-132H	500,-	
HFO 6T2M	6000	2000	30	300	230	190	730	650	80	54,4	1400,-	965-132H	200,-	963-132H	500,-	
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.																

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Ancestor Johann Jakob Sauter built the Hahn inclination scale out of iron, a foundation stone for weighing for the balance industry in Southern Germany



KERN is founded precision balances are produced



A proud Gottlieb Kern with his staff



Pharmaceutical balance

1880

with Aesculap



**German Excellence Group** Memb



Inflation - KERN wages are paid with self printed currency



1980 The electronic balance ousts mechanical devices



Accredited DKD laboratory (ISO 17025)



New premises in Balingen



2002 Existing QM system certification in accordance with DIN EN ISO 9001:2000 standards



Approval for the manufacture of medical products (DIN EN 13485 and 93/42/EEC)



Authorisation for initial verification by the manufacturer (2009/23/EC)



Approval for the manufacture and sale of height rods (DIN EN 13485 and 93/42/EEC)



2012 Verification point for non-automatic balances and test weights.

New customer portal www.kern-sohn.com goes live



Expansion of the product range to include optical instruments (microscopes and refractometers)



Inauguration of Ziegelei 2.0 with computer-controlled high-bay warehouse



Come with KERN into the digital future: Expansion of the model ranges compatible with Industry 4.0, as well as the related services



Significant anniversary year! 25 years of accredited DAkkS/DKD laboratory 175 years of KERN & SOHN 250 years of balance manufacture in the Sauter family-owned company



Construction of Ziegelei 3.0, extension of administration building



AUTHORISATION FOR INITIAL VERIFICATION