



## Precision industrial scale with laboratory accuracy, also with EC type approval [M] class II

### Features

- **High-capacity precision balance**, ideal for high volume or heavy samples to be weighed with a high degree of accuracy
- **User guidance step by step** on display by Yes/No dialogue
- Numerical subtraction of tare weight for known container weight. Useful for checking fill-levels
- **Precise counting**: The automatic reference weight optimisation of reference weight gradually improves the average piece weight value

- **KERN DS: Freely programmable weighing unit**, e.g. display direct in special units such as length of wire g/m, surface weight g/m<sup>2</sup>, or else

### Technical data

- Large backlit LCD display, digit height 18 mm
- Weighing plate dimensions, stainless steel W×D×H
  - A** 228×228×90 mm
  - B** 308×318×75 mm, see larger picture
  - C** 450×350×115 mm

- Dimensions of display device W×D×H 225×115×60 mm
- Cable length of display device approx.
  - A**, **B** 2 m
  - C** 0,6 m
- Permissible ambient temperature
  - KERN DS: 10 °C/40 °C
  - KERN DS-M: 10 °C/30 °C

### Accessories

- **Protective working cover** over the display device standard. Can be re-ordered, scope of delivery: 5 items, KERN DE-A12S05
- **1 Stand** to elevate display device, height of stand approx. 480 mm, can be retrofitted, KERN DE-A10
- **Mount to fasten the display device** to the platform, can be retrofitted, KERN DE-A11N
- **Wall mount** for display device, KERN DS-A02
- **2 Set for underfloor weighing**, consists of platform, bow, hook, only for models with weighing plate **B**, KERN DS-A01
- **Rechargeable battery pack external**, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KS-A01
- **Rechargeable battery pack internal**, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KB-A01N
- Further details, plenty of further accessories and suitable printers see *Accessories*

#### STANDARD



#### OPTION



#### FACTORY








































Model	Weighing range [Max] kg	Readout [d] g	Verification value [e] g	Minimal load [Min] g	Smallest part weight [counting] g/piece	Net weight approx. kg	Weighing plate	Options			
								Verification		DAkkS Calibr. Certificate	
								M	KERN	DKD	KERN
DS 3K0.01S	3	0,01	-	-	0,01	4,2	A	-	-	963-127	
DS 5K0.05S	5	0,05	-	-	0,05	4,2	A	-	-	963-127	
DS 8K0.05	8	0,05	-	-	0,05	8	B	-	-	963-128	
DS 10K0.1S	10	0,1	-	-	0,1	4,2	A	-	-	963-128	
DS 16K0.1	16	0,1	-	-	0,1	8	B	-	-	963-128	
DS 20K0.1	20	0,1	-	-	0,1	8	B	-	-	963-128	
DS 30K0.1	30	0,1	-	-	0,1	8	B	-	-	963-128	
DS 30K0.1L	30	0,1	-	-	0,1	10	C	-	-	963-128	
DS 36K0.2	36	0,2	-	-	0,2	8	B	-	-	963-128	
DS 36K0.2L	36	0,2	-	-	0,2	10	C	-	-	963-128	
DS 60K0.2	60	0,2	-	-	0,2	10	C	-	-	963-129	
DS 65K0.5	65	0,5	-	-	0,5	10	C	-	-	963-129	
DS 100K0.5	100	0,5	-	-	0,5	10	C	-	-	963-129	
DS 150K1	150	1	-	-	1	10	C	-	-	963-129	

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.

DS 65K1M	65	1	10	50	1	10	C		965-218		963-129
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# KERN Pictograms:

 <b>Internal adjusting:</b> Quick setting up of the balance's accuracy with internal adjusting weight (motordriven).	 <b>Piece counting:</b> Reference quantities selectable. Display can be switched from piece to weight.	 <b>Rechargeable battery pack:</b> Rechargeable set.
 <b>Adjusting program CAL:</b> For quick setting up of the balance's accuracy. External adjusting weight required.	 <b>Recipe level A:</b> Separate memory for the weight of the tare container and the recipe ingredients (net total).	 <b>Universal mains adapter:</b> with universal input and optional input socket adapters for A) EU, GB B) EU, GB, CH, USA C) EU, GB, CH, USA, AUS
 <b>Memory:</b> Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	 <b>Recipe level B:</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.	 <b>Mains adapter:</b> 230V/50Hz in standard version for EU. On request GB, USA or AUS version available.
 <b>Alibi memory:</b> Electronic archiving of weighing results, complying with the 2014/31/EU standard.	 <b>Recipe level C:</b> 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.	 <b>Power supply:</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request.
 <b>Data interface RS-232:</b> To connect the balance to a printer, PC or network.	 <b>Totalising level A:</b> The weights of similar items can be added together and the total can be printed out.	 <b>Weighing principle: Strain gauge</b> Electrical resistor on an elastic deforming body.
 <b>RS-485 data interface:</b> To connect the balance to a printer, PC or other peripherals. High tolerance against electromagnetic disturbance.	 <b>Percentage determination:</b> Determining the deviation in % from the target value (100 %).	 <b>Weighing principle: Tuning fork</b> A resonating body is electromagnetically excited, causing it to oscillate.
 <b>USB data interface:</b> To connect the balance to a printer, PC or other peripherals.	 <b>Weighing units:</b> Can be switched to e.g. non-metric units at the touch of a key. See balance model. Please refer to KERN's website for more details.	 <b>Weighing principle: Electromagnetic force compensation</b> Coil inside a permanent magnet. For the most accurate weighings.
 <b>Bluetooth* data interface:</b> To transfer data from the balance to a printer, PC or other peripherals.	 <b>Weighing with tolerance range:</b> Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning.	 <b>Weighing principle: Single cell technology</b> Advanced version of the force compensation principle with the highest level of precision.
 <b>WLAN data interface:</b> To transfer data from the balance to a printer, PC or other peripherals.	 <b>Hold function:</b> (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value.	 <b>Verification possible:</b> The time required for verification is specified in the pictogram.
 <b>Control outputs (optocoupler, digital I/O):</b> To connect relays, signal lamps, valves, etc.	 <b>Protection against dust and water splashes IPxx:</b> The type of protection is shown in the pictogram.	 <b>DAkKS calibration possible (DKD):</b> The time required for DAkKS calibration is shown in days in the pictogram.
 <b>Interface for second balance:</b> For direct connection of a second balance.	 <b>ATEX explosion protection:</b> Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.	 <b>Package shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram.
 <b>Network interface:</b> For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter.	 <b>Stainless steel:</b> The balance is protected against corrosion.	 <b>Pallet shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram.
 <b>Wireless data transfer:</b> between the weighing unit and the evaluation unit using an integrated radio module.	 <b>Suspended weighing:</b> Load support with hook on the underside of the balance.	 <b>Warranty:</b> The warranty period is shown in the pictogram.
 <b>GLP/ISO log:</b> The balance displays the weight, date and time, regardless of a printer connection.	 <b>Battery operation:</b> Ready for battery operation. The battery type is specified for each device.	
 <b>GLP/ISO log:</b> With weight, date and time. Only with KERN printers.		

## 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: