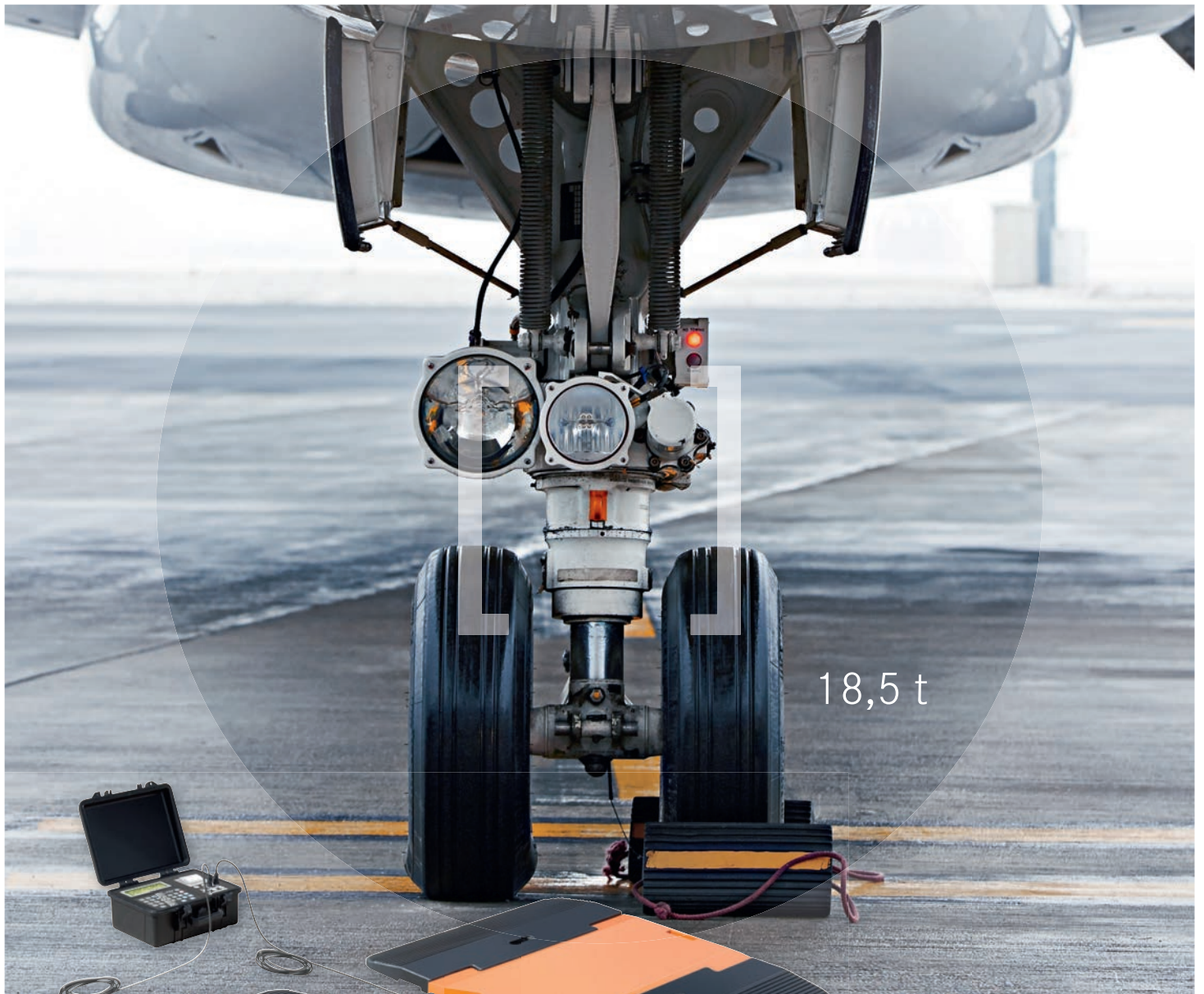


AXLE LOAD SCALES



18,5 t



PROFESSIONAL MEASURING

2016

KERN Pictograms

 Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven).	 Piece counting: Reference quantities selectable. Display can be switched from piece to weight.	 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.	 Recipe level A: Separate memory for the weight of the tare container and the recipe ingredients (net total).	 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.	 Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display.	 Rechargeable battery pack: Rechargeable set.
 Alibi memory: Electronic archiving of weighing results, complying with the 2009/23/EC standard. For details see page 214	 Recipe level C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, barcode.	 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.	 Totalising level A: The weights of similar items can be added together and the total can be printed out.	 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. High tolerance against electromagnetic disturbance.	 Totalising level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, 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 C: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, adjustment of recipe when dosages are exceeded, multiplier function, barcode recognition.	 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: Upper and lower limiting values can be programmed individually for e.g. dosing, sorting and portioning	 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.
 Network interface: For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter. See page 180	 Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram. For details see the glossary. See page 72.	 DAKkS calibration possible (DKD): The time required for DAKkS calibration is shown in days in the pictogram.
 Wireless data transfer: between the weighing unit and the evaluation unit using an integrated radio module.	 ATEX explosion protection: Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.	 Package shipment: The time required for internal shipping preparations is shown in days in the pictogram.
 GLP/ISO log: The balance displays the weight, date and time, regardless of a printer connection.	 Stainless steel: The balance is protected against corrosion.	 Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram.
 GLP/ISO log: With weight, date and time. Only with KERN printers, see "Accessories", see page 177.	 Warranty: The warranty period is shown in the pictogram.	

KERN – measuring technology and testing services from a single source



Balances & Test service catalogue

Provides a complete overview of the KERN line of balances, test weights, and services, services such as verification, calibration, etc.



Medical scales catalogue

Complete line of medical scales, from infant scales to patient scales, chair scales and adiposity scales, as well as hand grip dynamometers, chemist's balances, and veterinary scales.



Microscopes & refractometers catalogue

Extensive range in the area of optical instruments, such as, for example, biological microscopes, stereo microscopes, metallurgical microscopes, polarisation microscopes as well as analogue and digital refractometers.



SAUTER measuring equipment catalogue

Test instruments for industry and commerce, such as force, coating thickness, material thickness and calibration service.



KERN DAkKS calibration service brochure

Detailed information on topics pertaining to the calibration and verification of balances, test weights, and force measuring devices.



KERN flyer Special offers

Compact overview of our bestselling products – just the balances/measuring instruments/microscopes your customers need! Can be customised to suit your requirements.



The gnome guide

Travel report from KERN, the famous scientific gnome, who travelled all over the world, in order to illustrate the physical law of gravitational force. Ideal for use in school education – please request, it's free of charge.



170 years of KERN

Interesting and readable overview of the history of the origins of Southern German balance manufacturing, as well as the company history, which stretches right back to 1770 – please request, it's free of charge.

Your advantages

1 Quick Delivery

Items in stock are sent the same day if orders are placed before 1:00 pm (valid for parcel service delivery within the EC).

2 Price performance ratio

KERN scales are always an expensive alternative. They are durable, uncomplicated and easy to place into operation.

3 Direct dispatch

of ordered goods to your customer is available, with personalised delivery note if desired (please ask), invoice will be issued to you (third party business).

4 3 years warranty

Items under € 400,- : 2 years

5 No stock-keeping necessary.

KERN does the warehousing for you.

6 Sale or return

within 14 days of purchase.

Axle load scales

Over the legal limit!

Axle load or wheel load scales are an ideal weighing solution for mobile weighing of trucks, trailers, small aircrafts etc. on a non-verified basis.

Mobile axle load scales are often used to give indicative measurements, in particular on building sites, during harvest time in the agricultural industry or in the field of traffic monitoring, in order to establish whether vehicles are overloaded or incorrectly loaded. If such measurements will show inconsistencies, a second measurement can be carried out on a verified vehicle scale.

Compared with fixed vehicle scales, axle load scales are usually more affordable. They not require costly installation and with their compact dimensions and low weight they clearly score highly in terms of mobility.

Using the convenient software in the KERN axle load scales, individual axles can be weighed quickly and easily, one after another. When connected, the various weights at the individual wheels, the weight of the axle or the total weight of the vehicle can be displayed and transferred to the printer.

Thanks to its compact design with a depth of just 50 cm and the equalisation platforms, two axles can be weighed individually, even if they are installed to one another.

Alternatively the innovative design of the weighing pad allows for 2 axles to be measured at the same time and the results to be added when these 2 axles are installed right next to each other. This double construction is also recommended for vehicles or trailers with exceptionally large wheels.

The modular construction of the KERN VHP facilitates enable a wide... wide range of different combination and can therefore be adapted quickly to suit the on-site conditions:



Weighing of trucks, motor homes, trailers etc. for carrying out quick checks of axle weights in any location (Police), to detect and avoid incorrect loading or overloading



Weighing of tractors, trailers, trucks etc. for products and goods control at the point of receipt or dispatch in locations where there is no permanently installed vehicle scale or one is not available for financial reasons



Weighing of airplanes to calculate the loading scheme and determine the centre of gravity, to make sure that the permissible total weight is not exceeded and that the load is correctly distributed



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Quick-Finder Axle load scales

Read-out	Weighing range	Model	Price excl. of VAT ex works	Page	DAYS ready for shipping		
[d]	[Max]	KERN	€			For an explanation on the pictos, see the front flap	
5 kg	6 t	VHP 6T-3	6890,-	142	2	●	●
10 kg	15 t	VHP 15T-2	6890,-	142	2	●	●

● = Standard

○ = Option



Weighing of airplanes

Order example: standard package VHP 15T-2, see table on the right, 4 x ascending ramp VHP-A01, 2 x weighing pad KHP 75000V20LM

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Modular axle load scale for the mobile monitoring of vehicles up to 15 tones



Asynchronous weighing of individual axles

Order example: standard package VHP 6T-3 or VHP 15T-2, see table on the right



Asynchronous weighing of double axles which are installed next to each other, using compensation pads

Order example: standard package VHP 6T-3 or VHP 15T-2, see table on the right, 4 x ascending ramp VHP-A01, 2 x compensation pad VHP-A03



Simultaneous weighing of double axles, e.g. of a trailer

Order example: standard package VHP 15T-2, see table on the right, 4 x ascending ramp VHP-A01, 2 x weighing pad KHP 75000V20LM

Axle load scale KERN VHP



Features

- **Mobile axle load scale for rapid monitoring of vehicles.** Space-saving and affordable. Ideal for mobile police or customs checks, on landfill sites, gravel works, biogas plants etc.
- **1 Display device with integrated thermal transfer printer and rechargeable battery pack** in stable, lined transport case standard. 4 quick-release connectors to connect up to 4 weighing pads. The weighing results from the individual weighing pads can be issued individually or cumulatively
KERN VHP-T, **€ 1900,-**
- **2 Weighing pad (wheel load plate) extremely resistant to bending because of its high material thickness.** Particularly flat design, only 35 mm. Brackets for access ramps and spacer plates on both sides, and therefore quickly expendable
 - 2 rollers and 2 handles for easy transport of the weighing pad
 - 6 load cells, aluminium, **silicone-coated, IP65**

Technical data

- Backlit LCD display, digit height 10 mm
- Weighing plate dimensions WxDxH 900x500x35 mm
- Dimensions ascending ramp WxD 900x250 mm
- Dimensions display device (case) 355x300x165 mm
- Net weight for each weighing pad approx. 30,2 kg
- Net weight of each access ramp approx. 12 kg
- Net weight display device (case) approx. 9,2 kg
- **Rechargeable battery pack internal,** standard, operating time up to 13 hours with backlight without use of printer, charging time approx. 12 h. Can be re-ordered, KERN HFM-A01, **€ 50,-**
- Cable length of display device approx. 10 m
- Permissible ambient temperature -40 °C / 70 °C
- **Scope of supply:**
 - 2 weighing pads (wheel load plates)
 - 4 access ramps
 - 1 display device in stable transport case

Note: The standard scope of supplies (see technical data) can be expanded with further weighing pads, ramp extensions and balancing platforms (see accessories) and in this way the system can be adapted to cover a wide range of applications. Do you have any questions or special requests? Your KERN product specialist will be happy to help

Accessories

- **3 Weighing pad to expand the weighing system VHP,** steel, lacquered (orange), 2 rollers and 2 handles, dimensions WxDxH 900x500x35 mm, 1 piece, for model VHP 6T-3: [Max] = 3000 kg, [d] = 5 kg, KERN KHP 3000V20LM, **€ 2650,-**
VHP 15T-2: [Max] = 7500 kg, [d] = 10 kg, KERN KHP 7500V20LM, **€ 2650,-**
- **4 Ascending ramp,** extremely resistant rubber compound, dimensions WxDxH 900x250x35 mm, KERN VHP-A01, **€ 220,-**
- **5 Ramp extension,** extremely resistant rubber compound, dimensions WxDxH 900x545x35 mm, KERN VHP-A02, **€ 320,-**
- **6 Compensation pad,** extremely resistant rubber compound, dimensions WxDxH 900x545x35 mm, KERN VHP-A03, **€ 320,-**
- **Thermal receipt rolls** (10 pieces), suitable for the thermal transfer printer integrated in display device, length approx. 18 m, width 57 mm, Ø 51 mm, KERN RFS-A10, **€ 40,-**
- **DAkKS calibration certificate** (for both pads), see table. DAkKS calibration certificate for one pad, see page 213

STANDARD



OPTION

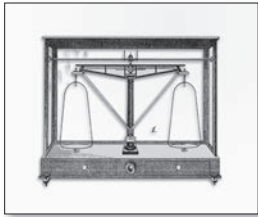


Model	Weighing range [Max] kg	Readout [d] kg	Weighing pad included with delivery [Max] kg	Price per pair excl. of VAT ex works €	Option DAkKS Calibr. Certificate	
					DKD KERN	€
VHP 6T-3	6000	5	2 x 3000	6890,- ↓	963-132A	880,-
VHP 15T-2	15000	10	2 x 7500	6890,- ↓	963-133A	1000,-

↓ Price reduction

Tradition and innovation for more than 170 years

An independent family business, KERN since already 7 generations is synonymous with quality and reliability in customer service.



► 1844

KERN is founded – precision balances are produced



► 1863

A proud Gottlieb Kern with his staff



► 1880

Pharmaceutical balance with Aesculap



► 1923

Inflation – KERN wages are paid with self printed currency



► 1980

The electronic balance ousts mechanical devices



► 1994

Accredited DKD laboratory (ISO 17025)



► 2000

New premises in Balingen



► 2002

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



► 2007

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



► 2008

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



► 2009

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



► 2014

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

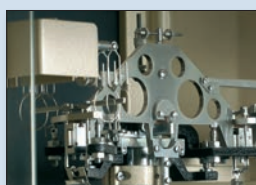


► 2015

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

Our Tip

Come to see the Museum of scale and weight ...



How a scale learned to weigh! Come and experience KERN history in the Zollernschloss at Balingen ...

www.balingen.de
→ "Kultur"

KERN – Tradition and Innovation for over 170 years

An independent family business, KERN since already 7 generations is synonymous with quality and reliability in customer service.

fast

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

reliable


- 3 years warranty for balances over € 400,-
- Precision in weighing technology for more than 170 years

competent


- DAkkS accreditation DIN EN ISO/IEC 17025
- Certified QM system DIN EN ISO 9001:2008
- Authorisation for initial verification by the manufacturer 2009/23/EC
- Medical certifications DIN EN ISO 13485 and 93/42/EEC


versatile


- One-stop shopping: from pocket balances through to floor scales – 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 [0] 7433 9933-0

 **Online-Shop**
www.kern-sohn.com

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

 **Service hotline**
+49 [0] 7433 9933-199

 **E-mail order**
info@kern-sohn.com

 **www.kern-sohn.com**
For product specification sheets, user manuals, useful information, technical glossary pictures and much more as well as a smart search engine for test weights and balances

 **Calibration hotline**
+49 [0] 7433 9933-196

 **Fax Order**
+49 [0] 7433 9933-146

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