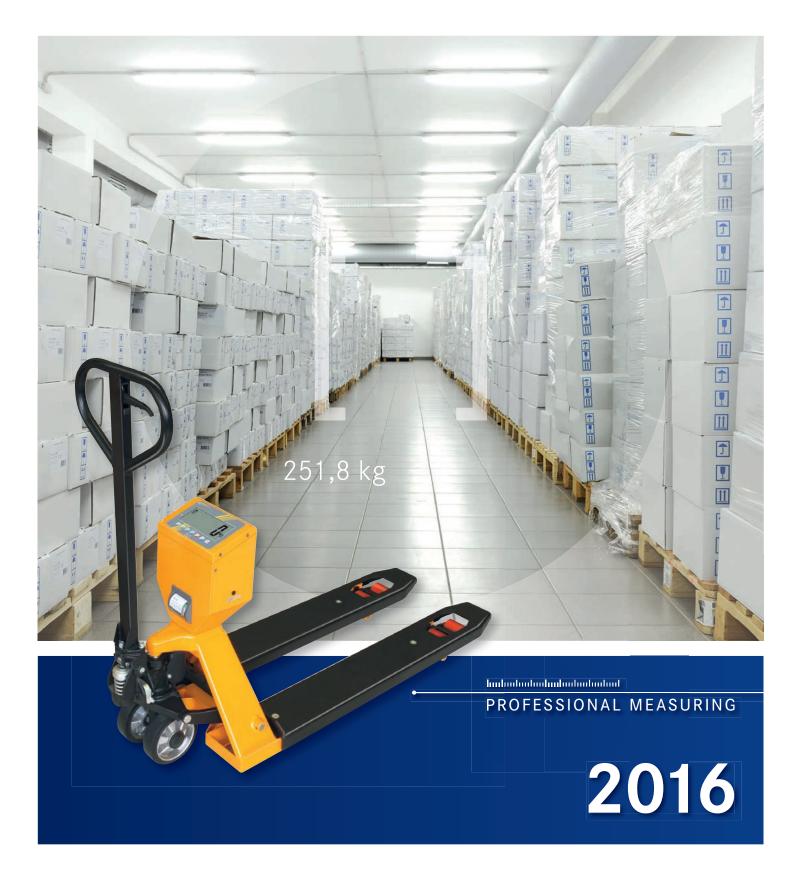


PALLET TRUCK SCALES



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.



Memory:

Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.



MEMORY

Alibi memory:

Electronic archiving of weighing results, complying with the 2009/23/EC standard. For details see page 214



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. High tolerance against electromagnetic disturbance.



USB

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.



WLAN 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.



Interface for second balance:

For direct connection of a second balance.



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



Wireless data transfer:

between the weighing unit and the evaluation unit using an integrated radio module.



GLP/ISO log:

connection.



GLP/ISO log:

With weight, date and time. Only with KERN printers, see "Accessories", see page 177.



RECIPE

RECIPE

RECIPE

SUM

SUM

Piece counting:

Recipe level A:

Recipe level B:

Recipe level C:

Totalising level A:

can be printed out.

Totalising level C:

recognition.

The weights of similar items can

be added together and the total

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

display.

ingredients (net total).

Reference quantities selectable. Display can be switched from piece to weight.

Separate memory for the weight of

Internal memory for complete recipes

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.

ingredients. User guidance through

with name and target value of the recipe

the tare container and the recipe



Suspended weighing:

Load support with hook on the underside of the balance.



Battery operation:

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, GB

B) EU, GB, CH, USA C) EU, GB, CH, USA, AUS



Mains adapter:

230V/50Hz in standard version for EU. 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 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



Weighing with tolerance range:

Percentage determination:

the target value (100 %).

Determining the deviation in % from

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.



Verification possible:

The time required for verification is specified in the pictogram.



Hold function:

(Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average



DAkkS calibration possible (DKD):

DAkkS The time required for DAkkS calibration is shown in days in the pictogram.





444

ΙP

Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram. For details see the glossary. See page 72.



Package shipment:

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





Suitable for use in hazardous industrial environments, in which there is explosion danger. The ATEX marking is specified for each device.



Pallet shipment:

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



Stainless steel:

The balance is protected against corrosion.

ATEX explosion protection:



2 DAYS

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,



Medical scales catalogue

Complete line of medical scales, from infant scales to patient scales, chair scales and adiposity scales, as well as hand grip dynamometres, 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



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).

Price performance ratio

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

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).



3 years warranty Items under € 400,-: 2 years



No stock-keeping necessary. KERN does the warehousing for you.



Sale or return within 14 days of purchase.

Weighing and transporting - just one operation

Speed up your warehouse and dispatch processes with the KERN pallet truck scales.

Get the exact weight of a load and at the same time, transport it to a specific location, all in one operation. This reduces commissioning times and avoids queues in front of fixed floor scales.

These mobile weighing solutions are space-saving and deliver reliable weighing results. Differences between given and actual weights can be determined quickly e.g. in the goods-in and out department. This uncovers inaccurate quantities, saves time and money and therefore ensures a very short amortisation period of the scales original cost.

KERN offers a carefully coordinated range from the affordable entry level model to the comfort model with printer and removable battery pack.

KERN pallet truck scales are of robust industrial quality, with high-level protection against dust and water splashes, with high-contrast, easy-to-read displays as well as solid wheels and load rollers - all this helps to give you practical support in your work - day after day.

Of course, all KERN pallet truck scales can also be calibrated and delivered with a DAkkS calibration certificate (optional). This ensures the high level of accuracy of your pallet truck

Quick-Finder Pallet truck scales										
Read- out	Weighing range	Model	Price excl. of VAT ex works	Page	DAYS ready for	CAL EXT	iP	BATT	ACCU	
[d]	[Max]	KERN	€		shipping				e front flap	
1 kg	2 t	VHB 2T1	1350,-	157	2	•	•	•		
1 kg	2 t	VFB 2T-3	1430,-	156	2	•	•		•	
1 kg	2 t	VFS 2T1	1780,-	158	2	•	•		•	
5 kg	2 t	VHE 2T5A	830,-	155	2	•	•	•		

= Standard O = Option



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Your product specialist's recommendation:

The power pack in the dispatch department and the warehouse

The display device is well-protected by a metal frame

Optimised load rollers so that you can get over rough ground more easily and greater manoeuvrability



Katharina Queitsch Product specialist Pallet truck scales

+49[0]7433 9933-218 Fax +49[0]74339933-29218 katharina.queitsch@kern-sohn.com









Entry-level model into mobile weighing

Features

- · Highly versatile for general checkweighing, e.g.: plausibility check at goods receiving, determining shipping weights, avoiding overloads, safety checks
- Very manoeuvrable thanks to its compact construction and low weight
- Particularly robust with its components having been relocated from the load fork into the protected housing area. It is therefore also ideal for heavy applications in the production area and on board lorries
- A Display device: Protection against dust and water splashes IP65
- · Low height of the loading forks easy uplifting to work with low pallets
- Pivot range 206°
- Castors: Solid rubber on aluminium rims
- Load rollers: Polyurethane

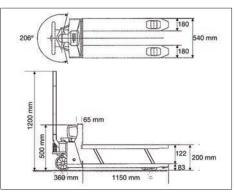
• Operation:

- 1 Switch on and then pump up the load fork to the reference height
- Tare off
- Release the load fork and load the goods to be weighed
- 4 Weighing: Pump the load fork with the goods to be weighed up to the reference height, read off the weight
- Ready for use: Batteries included 2 x 1.5 V AA. AUTO-OFF function to preserve the batteries. Operating time approx. 1 year/approx. 3000 weighings. Charge status indicator on display

Technical data

• Large LCD display, digit height 18 mm





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

STANDARD















DAkkS
Dimino
+3 DAYS

OPTION

Model	Weighing range	Readout	Net weight approx.	Permissible ambient	Price excl. of VAT	- 1	tion r. Certificate
KERN	[Max] kg	[d] kg	kg	temperature °C	ex works €	DKD KERN	€
VHE 2T5A	2000	5	65	-10 °C / 40 °C	830,-	963-131	220,-







Pallet truck scale with totalising function for weights and integrated rechargeable battery pack

Features

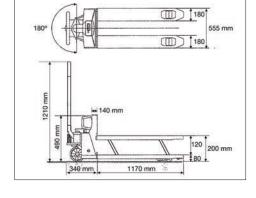
- **PRE-TARE function** for manual deduction of a known container weight (e.g. pallet, mesh crate etc.)
- Load fork: Protection against dust and water splashes IP67, temporary use in wet areas possible
- Pivot range 180°
- Castors: Solid rubber on aluminium rims
- 2 Load rollers: Tandem tyres to overcome thresholds and obstacles more easily.
 Material: Polyurethane
- Check the weighing range which is in use at the press of a button (net/gross weight)
- Totalising of weights
- Rechargeable battery pack internal, standard, operating time up to 40 h without backlight, charging time approx. 12 h.
 Can be re-ordered KERN VFB-A02, € 40,-

Technical data

• 3 Backlit LCD display, digit height 22 mm

Accessories

 Protective working cover over the display device, can be retrofitted, KERN VFB-A01S05, € 25,-



Note: As standard, the unit is dispatched without the shaft and display fitted. The shaft and display can be fitted at our factory for an additional cost, delivery + 2 working days, KERN VFS-M01, € 150,-Please state when ordering

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

STANDARD



















TJUNIJ	
only with VFS-M01	
ght	Permiss

Model	Weighing range	Readout	Net weight approx.	Permissible ambient	Price excl. of VAT	- 1	ion r. Certificate
	[Max]	[d]		temperature	ex works	DKD	
KERN	kg	kg	kg	°C	€	KERN	€
VFB 2T-3	2000	1	126	-10 °C / 40 °C	1430,-	963-131	220,-







Pallet truck scale with complete protection against dust and water splashes IP65/67 and a memory for a container weight

Features

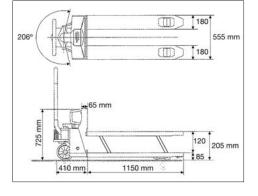
- PRE-TARE function for manual subtraction of a known container weight, value can be saved
- **II** Display device: Protection against dust and water splashes IP65
- 2 Load fork: Protection against dust and water splashes IP67, temporary use in wet areas possible
- Pivot range 206°
- Castors: Solid rubber on aluminium rims
- 3 Load rollers: Tandem tyres to overcome thresholds and obstacles more easily. Material: Polyurethane
- Totalising of weights
- Ready for use: Batteries included (4 x 1.5 V AA). AUTO-OFF function to preserve the batteries. Operating time approx. 80 h / 1700 weighings

Technical data

• Large LCD display, digit height 28 mm

Accessories

· Castors made of red polyurethane on aluminium rims. Ideal for light-coloured flooring as they leave less visible abrasive marks. Suitable for the current models of the pallet truck scale ranges KERN VHB, KERN VHS (when retrofitting, please give the serial number of the pallet truck scale available when ordering), KERN VHB-A02, € 120,-



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

STANDARD





















Model	Weighing range	Readout	Net weight approx.	Permissible ambient	Price excl. of VAT	- P	tion r. Certificate
	[Max]	[d]		temperature	ex works	DKD	
KERN	kg	kg	kg	°C	€	KERN	€
VHB 2T1	2000	1	120	-10 °C / 40 °C	1350,-	963-131	220,-







Pallet truck scale with large display, integrated printer, rechargeable battery pack and complete dust and spray protection to IP 65/67

Features

- PRE-TARE function for manual deduction of a known container weight (e.g. pallet, mesh crate etc.)
- II Display device: Protection against dust and water splashes IP65
- 2 Load fork: Protection against dust and water splashes IP67, temporary use in wet areas possible
- Pivot range 180°
- · Castors: Solid rubber on aluminium rims
- Load rollers: Tandem tyres to overcome thresholds and obstacles more easily. Material: Polyurethane
- · Rechargeable battery pack internal, standard, operating time up to 60 h, charging time approx. 12 h. Can be re-ordered, KERN HFM-A01, € 50,-

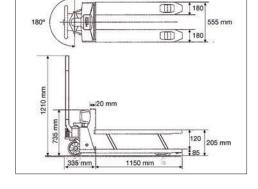
• Integrated thermal printer, standard. Printout with date and time. Width of paper 56 mm, 20 characters/line, print-out speed up to 45 mm/sec, temperature range 0 °C / +40 °C

Technical data

• Large backlit LCD display, digit height 52 mm

Accessories

• Thermal receipt rolls (10 pieces), width 56 mm, Ø 51 mm, KERN RFS-A10, € 40,-



Note: As standard, the unit is dispatched without the shaft and display fitted. The shaft and display can be fitted at our factory for an additional cost, delivery + 2 working days, KERN VFS-M01, € 150,-Please state when ordering

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

STANDARD























Model	Weighing range	Readout	Net weight approx.	Permissible ambient	Price excl. of VAT	- P	tion r. Certificate
	[Max]	[d]		temperature	ex works	DKD	
KERN	kg	kg	kg	, C	€	KERN	€
VFS 2T1	2000	1	125	-10 °C / 40 °C	1780,-	963-131	220,-

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 ...



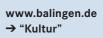








How a scale learned to weigh! Come and experience KERN history in the Zollernschloss at Balingen ...



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



Service hotline +49 [0] 7433 9933-199



E-mail order info@kern-sohn.com



Calibration hotlinee +49 [0] 7433 9933-196



Fax Order +49 [0] 7433 9933-146



Our team of consultants will assist you

from Monday to Friday from 8:00 am to 6:00 pm



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

KERN & SOHN GmbH Balances, Test weights, DAkkS Calibration laboratory

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