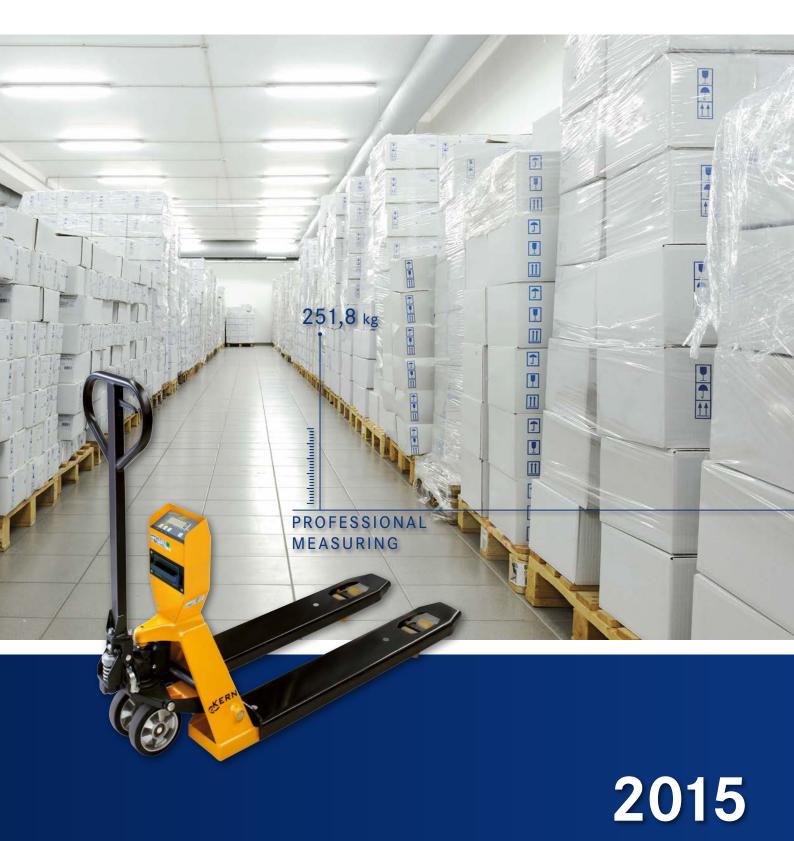


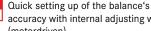
PALLET TRUCK SCALES



KERN Pictograms



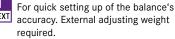
Internal adjusting:



accuracy with internal adjusting weight (motordriven).



Adjusting program CAL:





Memory:

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



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 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



Network interface:

For connecting the scale to an Ethernet network. With KERN products you can use a universal RS-232/LAN converter.



GLP/ISO log:

The balance displays the weight, date and time, regardless of a printer connection.



GLP/ISO log:

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



Piece counting:

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



RECIPE

SUM

SUM

/0

TOL

~**_**

MOVE

666

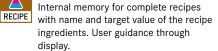
IP

ATEX

Recipe level A:

Separate memory for the weight of the tare container and the recipe ingredients (net total).







Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back calculation functions.



Suspended weighing:

Load support with hook on the underside of the balance.



Battery operation:

BATT

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

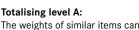
è.	ACCU

Rechargeable battery pack: Rechargeable set.



Mains adapter:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available.



Internal memory for complete recipes

with name and target value of the

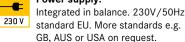
recipe ingredients. User guidance through display. Additional convenient functions, such as barcode and back

be added together and the total

can be printed out.

Totalising level C:

Power supply:



Strain gauges: Electrical resistor on an elastic DMS deforming body.



Tuning fork principle:

A resonating body is electromagnetically T-FORK excited, causing it to oscillate.



N FORCE

Electromagnetic force compensation: Coil inside a permanent magnet. For the most accurate weighings.



Single cell technology:

Advanced version of the force compen-SC TECH sation principle with the highest level of precision.



Verification possible:

The time required for verification is specified in the pictogram.



DAkkS calibration possible:

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

Package shipment:



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

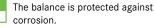


Pallet shipment:

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



Stainless steel:



for each device.



Warranty:

The warranty period is shown in the pictogram.



calculation.

Percentage determination: Determining the deviation in % from PERCENT the target value (100 %).

Weighing with tolerance range:

Upper and lower limiting values can be

programmed individually for e.g. dosing,

When the weighing conditions are un-

Protection against dust and water

The type of protection is shown in the

ATEX explosion protection:

pictogram. For details see the glossary.

Suitable for use in hazardous industrial

environments, in which there is explosion

danger. The ATEX marking is specified

stable, a stable weight is calculated as





Weighing units:

Can be switched to e.g. nonmetric units UNIT at the touch of a key. See balance model. Please refer to KERN's website for more details.

sorting and portioning.

Vibration-free weighing:

(Animal weighing program)

an average value.

splashes IPxx:

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.



Medical scales catalogue

Complete line of medical scales, from infant scales to professional patient scales, chair scales and adiposity scales, as well as innovative 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 hardness measuring systems.



KERN DAkkS calibration service brochure

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



KERN branch prospectuses

Compact overview of the bestsellers for many different lines of business – just the balances your customers need!



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,-



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



Sale or return within 14 days of purchase.

15

Pallet truck scales

VHE-A	143
Robust entry-level model into mobile weighing	
VFB	144
Pallet truck scale with integrated rechargeable battery pack	
VHB	145
Robust pallet truck scale, with a memory for a container weight	
VFS	146
Pallet truck scale with large display, integrated printer and rechargeable battery pack	

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. Like this you uncover inaccurate quantities, save time and money and therefore ensure a very short amortisation period of the scales original cost.

KERN offers a carefully coordinated range from the affordable entry level model, to the easy-to-use models with counting function, printer or removable battery pack for a constant functionality.

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 scale.

Your KERN product specialist will be happy to help:



Katharina Queitsch Product specialist Pallet truck scales

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

Quick	Quick-Finder Pallet truck scales												
Read- out	Weighing range	Model	Price excl. of VAT ex works	Page	DAYS ready for	CAL EXT	IP	BATT					
[d]	[Max]	KERN	€		shipping	For an explanation on the pictos, see the front flag							
1 kg	2 t	VFB 2T-3	1310,-	144	2	•	•		•				
1 kg	2 t	VHB 2T1	1340,-	145	2	•	•	•					
1 kg	2 t	VFS 2T1	1690,-	146	2	•	•		•				
5 kg	2 t	VHE 2T5A	830,-	143	2	•	•	•					
							• = Standard	1	o = Optio				

Pallet truck scale KERN VHE-A

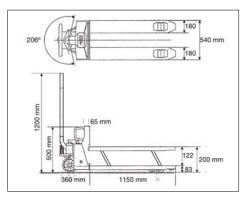












Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs

STANDARD						OPTION	
	666)	3 _{YEARS}	DAkkS	
CAL EXT	IP 65	BATT	DMS	2 DAYS	WARRANTY	+3 DAYS	
	٨						

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

Robust entry-level model into mobile weighing

Features

- 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
- Display device: Protection against dust and water splashes IP65
- · Low height of the loading forks easy uplifting of low pallets
- Pivot range 206°
- Castors: Solid rubber on aluminium rims
- Load rollers: Polyurethane
- Specially constructed for general checkweighing, e.g.: plausibility check at goods receiving, determining shipping weights, avoiding overloads, safety checks

• Operation:

- Switch on and then pump up the load fork to the reference height
- Tare
- 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

15

Pallet truck scale KERN VFB



Pallet truck scale with integrated rechargeable battery pack

Features

- **PRE-TARE function** for manual deduction of a known container weight (e.g. pallet, mesh crate etc.), this value can be stored
- **II Load cells:** Protection against dust and water splashes IP67, temporary use in wet areas is possible
- Pivot range 180°
- Castors: Solid rubber on aluminium rims
- Load rollers: Tandem tyres to overcome thresholds and obstacles more easily. Material: Polyurethane
- Net/gross weight: to control the consumed weighing range at the touch of a key
- Totalising of weights

15

• Rechargeable battery pack internal, standard, operating time up to 40 h without backlight, charging time approx. 12 h

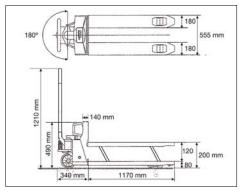
Technical data

• Backlit LCD display, digit height 22 mm

Accessories

• Protective working cover over the display device, can be retrofitted, KERN VFB-A01, € 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								OPTION
		666				, , , , , , , , , , , , , , , , , , , 	3 YEARS	DAkkS
CAL EXT	SUM	IP 67	ACCU	230 V	DMS	2 DAYS	WARRANTY	+3 DAYS
		1						only with VFS-M01

Model	Weighing range	Readout	Net weight	Permissible ambient	Price excl. of VAT	Option DAkkS Calibr. Certificate	
KERN	[Max] kg	[d] kg	approx. kg	temperature °C	ex works €	DAkks Kern	€
VFB 2T-3	2000	1	126	-10 °C / 40 °C	1310,-	963-131	220,-

Pallet truck scale KERN VHB



Robust pallet truck scale, with a memory for a container weight

Features

- **PRE-TARE function** for manual subtraction of a known container weight, which can be saved
- Display device: Protection against dust and water splashes IP65
- **Z** Load cells: Protection against dust and water splashes IP67, temporary use in wet areas possible
- Pivot range 206°
- Castors: Solid rubber on aluminium rims
- Load rollers: Tandem tyres to come over 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 (without use of printer)

Technical data

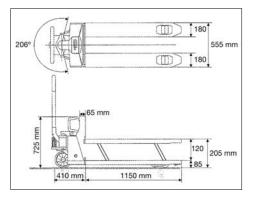
• Large LCD display, digit height 28 mm

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									OPTION
Т.	C		666	666			.	3 _{YEARS}	DAkkS
CAL EXT	UNIT	SUM	IP 65	IP 67	BATT	DMS	2 DAYS	WARRANTY	+3 DAYS
			1	2					

Model	Weighing range	Readout	Net weight	Permissible ambient	Price excl. of VAT	Option DAkkS Calibr. Certificate	
KERN	[Max] kg	[d] kg	approx. kg	temperature °C	ex works €	DAkkS KERN	€
VHB 2T1	2000	1	120	-10 °C / 40 °C	1340,-	963-131	220,-

ONLY WHILE STOCKS LAST

For more information, please visit www.kern-sohn.com/en/VHB ·Order hotline +49[0]7433 9933-0

15

Pallet truck scale KERN VFS







Pallet truck scale with large display, integrated printer and rechargeable battery pack

Features

- **PRE-TARE function** for manual subtraction of a known container weight, e.g. pallet cages, pallets etc., which cannot be saved
- Display device: Protection against dust and water splashes IP65
- **2** Load cells: Protection against dust and water splashes IP67, temporary use in wet areas is possible
- Pivot range 180°

15

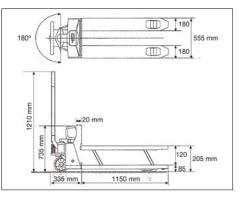
- Castors: Solid rubber on aluminium rims
- Load rollers: Tandem tyres to overcome thresholds and obstacles more easily. Material: Polyurethane
- Rechargeable battery pack internal, standard, operating time up to 60 h, charging time approx. 12 h
- Integrated thermal printer, standard. Printout with date 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, € 35,-



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				OPTION			
CAL EXT SUM	IP 65 IP 67 ACC I 2		2 DAYS WARRANTY	DAkkS +3 DAYS only with VFS-M01			
Model	Weighing range	Weighing range Readout		Permissible ambient	Price excl. of VAT	Opt DAkkS Calib	tion r. Certificate
	[Max] [d]		approx.	temperature	ex works	DAkkS	_
KERN	kg	kg	kg	°C	€	KERN	€
VFS 2T1	2000	1	126	-10 °C / 40 °C	1690,-	963-131	220,-

Tradition and innovation for more than 170 years

An independent family business, KERN since already 6 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



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

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



▶ 2013

Starting construction of Ziegelei 2.0 with computer-controlled high-bay warehouse



▶ 2014

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



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 6 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



Service hotline +49[0]74339933-199



Calibration hotline +49[0]74339933-196

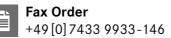


a

Online-Shop www.kern-sohn.com



info@kern-sohn.com





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 Ziegelei 1 72336 Balingen Germany

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