KERN®

PALLET TRUCK SCALES

PROFESSIONAL
MEASURING

2018

KERN Pictograms

Internal adjusting:
Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)
CAL INT

GLP/ISO log:
The balance displays serial number, user ID, weight, date and time, regardless of a printer connection
GLP INTERN

Suspended weighing:
Load support with hook on the underside of the balance
UNDER

Adjusting program CAL:
For quick setting up of the balance's accuracy. External adjusting weight required
CAL EXT

GLP/ISO log:
With weight, date and time. Only with KERN printers, see page 154/155
GLP PRINTER

Battery operation:
Ready for battery operation. The battery type is specified for each device
BATT

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

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

Rechargeable battery pack:
Rechargeable set
ACCU

Alibi memory:
Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard. For details see page 191
ALIBI

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

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
MULTI

Data interface RS-232:
To connect the balance to a printer, PC or network
RS 232

Recipe level B:
Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display
RECIPE

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

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
RS 485

Recipe level C:
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
RECIPE

Power supply:
Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
230 V

USB data interface:
To connect the balance to a printer, PC or other peripherals
USB

Weighing principle: Strain gauges
Electrical resistor on an elastic deforming body
DMS

Bluetooth* data interface:
To transfer data from the balance to a printer, PC or other peripherals
BT

Totalising level A:
The weights of similar items can be added together and the total can be printed out
SUM

Weighing principle: Tuning fork
A resonating body is electromagnetically excited, causing it to oscillate
T-FORK

WLAN data interface:
To transfer data from the balance to a printer, PC or other peripherals
WLAN

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

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

Control outputs (optocoupler, digital I/O):
To connect relays, signal lamps, valves, etc.
SWITCH

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
UNIT

Weighing principle: Single cell technology
Advanced version of the force compensation principle with the highest level of precision
SC TECH

Interface for second balance:
For direct connection of a second balance
DUAL

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
TOL

Verification possible:
The time required for verification is specified in the pictogram
M +3 DAYS

Network interface:
For connecting the scale to an Ethernet network
LAN

DAkkS calibration possible (DKD):
The time required for DAkkS calibration is shown in days in the pictogram
DAkkS +3 DAYS

Wireless data transfer:
between the weighing unit and the evaluation unit using an integrated radio module
RC

Hold function:
(Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value
MOVE

Package shipment:
The time required for internal shipping preparations is shown in days in the pictogram
1 DAY

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
KCP PROTOCOL

Protection against dust and water splashes IPxx:
The type of protection is shown in the pictogram. For details see page 58
IP

Pallet shipment:
The time required for internal shipping preparations is shown in days in the pictogram
2 DAYS

Stainless steel:
The balance is protected against corrosion
INOX

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 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.

DAkkS calibration service brochure

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

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 170 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/EEC

versatile

- One-stop shopping: from pocket balances through to 15 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 [0] 7433 9933 - 0

Service hotline
+49 [0] 7433 9933 - 199

Calibration hotline
+49 [0] 7433 9933 - 196

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

Online Shop
www.kern-sohn.com

E-mail order
info@kern-sohn.com

Fax order
+49 [0] 7433 9933 - 146

www.kern-sohn.com
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.

Pallet truck scales

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 (DKD) (optional). This ensures the high level of accuracy of your pallet truck scale.

Quick-Finder Pallet truck scales

Read-out [d] kg	Weighing range [Max] kg	Model KERN	Price excl. of VAT ex works €	Page	DAYS	CAL EXT	SUM	IP	BATT	ACCU
					For an explanation on the pictos, see the front flap					
1	2000	**VFB 2T-3**	**1430,-**	137	2	●	●	●		●
1	2000	**VHB 2T1**	**1350,-**	138	2	●	●	●	●	
5	2000	**VHE 2T5A**	**990,-**	136	2	●		●	●	

● = Standard   ○ = Option

HIGH-LIGHT

only €
990,-
page 136

▶ **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**

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Pallet truck scales

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KERN VHE-A

Pallet truck scale KERN VHE-A

Entry-level model into mobile weighing
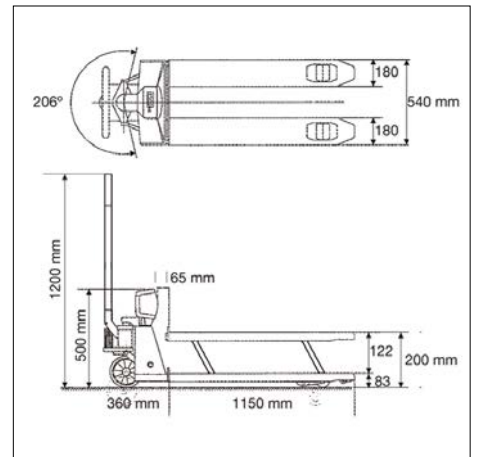
Features

- **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
- Ⓐ **Display device:** plastic, 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
2 Tare off
3 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, 2×1.5 V AA, operating time up to 100 h, AUTO-OFF function to preserve the battery

Technical data

- Large LCD display, digit height 18 mm
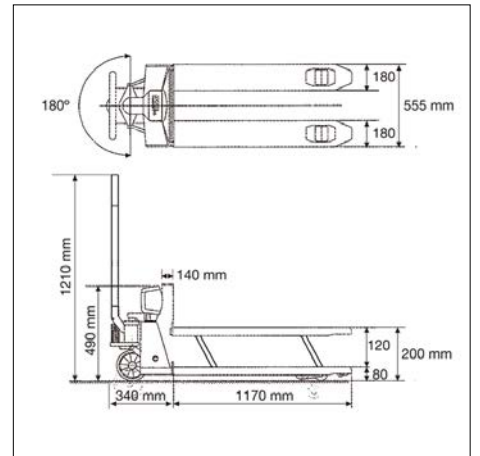- Permissible ambient temperature -10 °C/40 °C

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

STANDARD

| CAL EXT | IP 65 | BATT | DMS | 2 DAYS |
Ⓐ

OPTION

| DAkkS +3 DAYS |

Model	Weighing range	Readout	Net weight	Price	Option	
				excl. of VAT ex works	DAkkS Calibr. Certificate	
KERN	[Max] kg	[d] kg	approx. kg	€	DKD KERN	€
VHE 2T5A	2000	5	65	**990,-** ⬇	963-131	220,-

⬇ Price reduction

Pallet truck scale KERN VFB

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
- ◳ **Load rollers:** Tandem tyres to overcome thresholds and obstacles more easily
- **Check the weighing range which is in use** at the press of a button (net/gross weight)
- **Totalising** of weights
- Rechargeable battery pack internal, operating time up to 40 h without backlight, charging time approx. 12 h

Technical data

- ◲ Backlit LCD display, digit height 22 mm
- Permissible ambient temperature -10 °C/40 °C
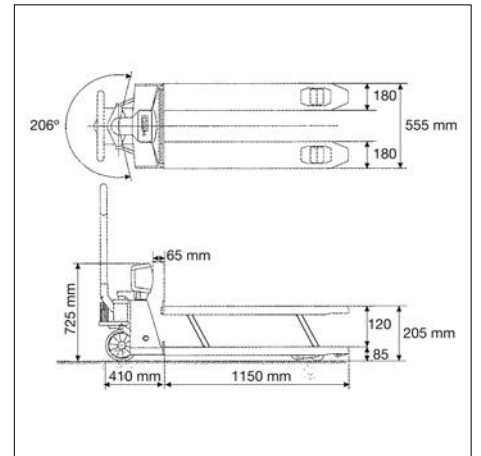
Accessories

- **Protective working cover** over the display device, scope of delivery: 5 items, KERN VFB-A01S05

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

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

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Model	Weighing range	Readout	Net weight	Price	Option	
				excl. of VAT	DAkkS Calibr. Certificate	
	[Max]	[d]	approx.	ex works	DKD	
KERN	kg	kg	kg	€	KERN	€
VFB 2T-3	2000	1	110	**1430,-**	963-131	220,-

Pallet truck scale KERN VHB

PREMIUM
★★★

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, useful for checking fill-levels
- **1 Display device:** plastic, 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
- **Totalising** of weights
- **Ready for use:** Batteries included, 4×1.5 V AA, operating time up to 80 h
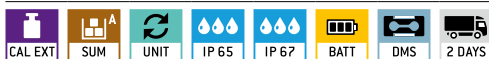
Technical data

- Large LCD display, digit height 28 mm
- Permissible ambient temperature -10 °C/40 °C

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), scope of delivery: 1 item, KERN VHB-A02

! Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs
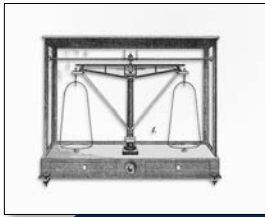
	STANDARD							OPTION
CAL EXT	SUM	UNIT	IP 65	IP 67	BATT	DMS	2 DAYS	DAkkS +3 DAYS
			1	2				

Model	Weighing range	Readout	Net weight	Price excl. of VAT ex works	Option DAkkS Calibr. Certificate	
KERN	[Max] kg	[d] kg	approx. kg	€	DKD KERN	€
VHB 2T1	2000	1	110	**1350,-**	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/EU)

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

2017

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

DQS MED
Quality Management
ISO 9001

AUTHORISATION FOR INITIAL VERIFICATION BY THE MANUFACTURER 2014/31/EU

German Excellence Group
Member