# **KERN BALANCES & TEST SERVICES 2022**

# KERN

# Pallet truck scale KERN VHB



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
- Display device: plastic, protection against dust and water splashes IP65
- Load fork: Protection against dust and water splashes IP67, temporary use in wet areas possible
- Pivot range 206°
- Castors: Solid rubber on aluminium rims
- Is 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**

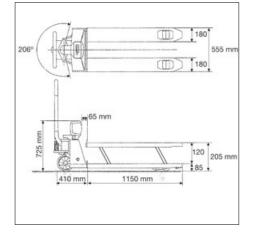
- Large LCD display, digit height 28 mm
- Permissible ambient temperature -10 °C/40 °C

### 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 range KERN VHB (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

STANDARD								OPTION
<b>T</b>		$\mathcal{C}$	666	666	<b></b>		<b>.</b>	DAkkS
CAL EXT	SUM	UNIT	IP 65	IP 67	BATT	DMS	2 DAYS	+3 DAYS
			1	2				

Model	Weighing capacity	Readability	Net weight	Option
				DAkkS Calibr. Certificate
	[Max]	[d]	approx.	DAkkS
KERN	kg	kg	kg	KERN
VHB 2T1	2000	1	110	963-131

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# **KERN BALANCES & TEST SERVICES 2022**

#### **Pictograms**

#### Internal adjusting: Quick setting up of the balance's accuracy with



# internal adjusting weight (motordriven)

CAL EXT

## Adjusting program CAL:

For quick setting up of the balance's accuracy. External adjusting weight required



# Easy Touch:

Suitable for the connection, data transmission and control through PC or tablet.

#### Memory: MEMORY

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



Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.

### Data interface RS-232:

• 6558.• To connect the balance to a printer, PC or RS 232 network



# **RS-485 data interface:**

To connect the balance to a printer, PC or other peripherals. Suitable for datatransfer over large distances. Network in bus topology is possible



# 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



\*

# WiFi 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.



# Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements



# Interface for second balance:

For direct connection of a second balance



# Network interface:

For connecting the scale to an Ethernet network



KCP

PROTOCOL

GLP/ISO log: With weight, date and time. Only with KERN

PRINTER printers.

**KERN Communication Protocol (KCP):** 

It is a standardized interface command set for

KERN balances and other instruments, which

devices featuring KCP are thus easily integrated

with computers, industrial controllers and other

The balance displays serial number, user ID,

weight, date and time, regardless of a printer

allows retrieving and controlling all relevant parameters and functions of the device. KERN

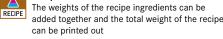
# **Piece counting:**

connection

digital systems GLP/ISO log:

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

## Recipe level A:



#### Recipe level B:

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

#### **Totalising level A:**

Η' The weights of similar items can be added SUM together and the total can be printed out

#### Percentage determination:

Determining the deviation in % from the target value (100 %)

#### Weighing units:

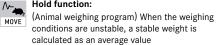
C Can be switched to e.g. nonmetric units. See UNIT balance model. Please refer to KERN's website for more details



#### 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

#### Hold function:





Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram.

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#### Weighing principle: Strain gauges:

Suspended weighing:

**Battery operation:** 

Rechargeable set

specified for each device

C) EU. CH. GB. USA. AUS

Plug-in power supply:

Rechargeable battery pack:

Universal plug-in power supply:

Integrated power supply unit:

with universal input and optional input socket

230V/50Hz in standard version for EU, CH.

On request GB, USA or AUS version available

Integrated in balance. 230V/50Hz standard EU.

More standards e.g. GB, USA or AUS on request

adapters for A) EU, CH, GB; B) EU, CH, GB, USA;

balance

Load support with hook on the underside of the

Ready for battery operation. The battery type is

÷.

UNDER

BATT

ACCU

MULTI

230 V

-6-

230 V

Electrical resistor on an elastic deforming body DMS



# 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 principle: Single cell technology:

Advanced version of the force compensation principle with the highest level of precision



#### М +3 DAYS

The time required for verification is specified in the pictogram



## DAkkS calibration possible (DKD):

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



# Factory calibration (ISO):

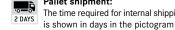
The time required for Factory calibration is shown in days in the pictogram

#### 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



Your KERN specialist dealer:

**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 bestequipped 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



- · 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, EN, FR, IT, ES, NL, PL
- · Conformity evaluation and reverification of balances and test weights