KERN®

PRICE COMPUTING SCALES

PROFESSIONAL
MEASURING

2018

KERN Pictograms

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 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

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

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

Stainless steel:
The balance is protected against corrosion
INOX

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

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

Rechargeable battery pack:
Rechargeable set
ACCU

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

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

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

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

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

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

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

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

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

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

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

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.

Price computing scales

Price computing scales are used wherever the price of goods is calculated dependent on the weight of the goods. These scales are subject to obligatory verification (▸ *Verification*) in accordance with European Directive 2014/31/EU. Usually, are verification class 〔M Ⅲ〕 scales

KERN mobile retail scales are compact in size and therefore save space on the sales counter. Thanks to the simple menu structure they are easy to use – saving time and money.

Fitted with mains or rechargeable batteries as standard, price computing scales can be used in retail shops as well as on mobile sales stalls.

All price computing scales from KERN have three displays showing you all important information at a glance:

· Weight display in kg (verifiable)
· Unit price in €/kg or €/100 g
· Total price in €

Note: The KERN RFE range also displays the TARE or PRE-TARE value, which enables this value to be stored in a legally binding way in accordance with the Weights and Measures Act.

Even the KERN entry level retail scales have direct access keys for memories (▸ *PLU*), The sales item with the relevant price can be stored against these PLU. In this way, frequently used sales items can called up at lightning speed. This accelerates customer service and reduces waiting times.

Quick-Finder Price computing scales

Read-out [d] g	Weighing range [Max] kg	Model KERN	Price excl. of VAT ex works €	Page	DAYS	M	CAL EXT	RS 232	MEMORY	IP	ACCU
							For an explanation on the pictos, see the front flap				
1 | 2	3 | 6	RIB 6K-3M	210,-	68	1	○	●		●		○
1 | 2	3 | 6	RIB 6K-3HM	240,-	68	1	○	●		●		○
1 | 2	3 | 6	RPB 6K1DM	215,-	69	1	○	●	●	●		○
1 | 2	3 | 6	RPB 6K1DHM	245,-	69	1	○	●	●	●		○
1 | 2	3 | 6	RFE 6K3M	295,-	70	1	○	●	●	●	●	○
2 | 5	6 | 15	RIB 10K-3M	210,-	68	1	○	●		●		○
2 | 5	6 | 15	RIB 10K-3HM	240,-	68	1	○	●		●		○
2 | 5	6 | 15	RPB 15K2DM	215,-	69	1	○	●	●	●		○
2 | 5	6 | 15	RPB 15K2DHM	245,-	69	1	○	●	●	●		○
2 | 5	6 | 15	RFE 15K3M	295,-	70	1	○	●	●	●	●	○
5 | 10	15 | 30	RIB 30K-2M	210,-	68	1	○	●		●		○
5 | 10	15 | 30	RIB 30K-2HM	240,-	68	1	○	●		●		○
5 | 10	15 | 30	RPB 30K5DM	215,-	69	1	○	●	●	●		○
5 | 10	15 | 30	RPB 30K5DHM	245,-	69	1	○	●	●	●		○
5 | 10	15 | 30	RFE 30K3M	295,-	70	1	○	●	●	●	●	○

☐ News 2018

● = standard ○ = option

HIGH-LIGHT

only €
295,-
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▸ **Intuitive operation**
▸ **Large number of item memories**
▸ **Little space requirements**
▸ **Mains operation and rechargeable battery pack possible**
▸ **4. Display for TARE or PRE-TARE value**
▸ **Second display which can be fitted on the back of the balance or on a column**

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KERN RFE

Price computing scale KERN RIB

Robust retail scale with large item memory, user-friendly handling and EC type approval [M]

Features

- 1 KERN RIB-HM: **Elevated display backlit,** height of stand approx. 530 mm, must be ordered at purchase
- 2 KERN RIB-M: **Second display** on the rear of the balance
- **Three displays** for weight display (verifiable), reference weight, total weight
- **Calculation of change**
- **10 Direct price keys** for frequently recurring article prices
- **Memory (PLU) for 20 article prices**
- **Energy management:** Backlight turns off after 5 sec, can be switched off
- **Soil-resistant construction** through water channels at the frame of the housing and sealing rings over the upper housing inlets
- **Protective working cover** included with delivery

Technical data

- Large backlit LCD displays, digit height 18 mm
- Dimensions weighing surface, stainless steel, W×D 294×225 mm
- Overall dimensions W×D×H
  KERN RIB-M: 325×400×115 mm
  KERN RIB-HM: 325×400×400 mm
- Net weight
  KERN RIB-M: approx. 3,2 kg
  KERN RIB-HM: approx. 3,8 kg
- Permissible ambient temperature
  -10 °C/40 °C

Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN RIB-A01S05, **€ 40,-**
- **Rechargeable battery pack internal**, operating time up to 80 h without backlight, charging time approx. 14 h, KERN GAB-A04, **€ 40,-**
- 3 **Tare pan made of stainless steel**, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, **€ 55,-**

Application examples
- retail shops
- market places
- farm shops
- pick your own fruit and vegetable sales

Note: Official verification duty for commercial trade

STANDARD						OPTION		FACTORY
CAL EXT	MEMORY	UNIT	230 V	DMS	1 DAY	ACCU	DAkkS +3 DAYS	M +3 DAYS

Model	Weighing range	Readout	Verification value	Minimum load	Price	Options			
					excl. of VAT	Verification		DAkkS Calibr. Certificate	
KERN	[Max] kg	[d] g	[e] g	[Min] g	ex works €	M Ⅲ KERN	€	DKD KERN	€
Dual-range balance switches automatically to the next largest weighing range [Max] and readout [d].									
RIB 6K-3M	3 | 6	1 | 2	1 | 2	20 | 40	**210,-**	965-228	70,-	963-128	88,-
RIB 10K-3M	6 | 15	2 | 5	2 | 5	40 | 100	**210,-**	965-228	70,-	963-128	88,-
RIB 30K-2M	15 | 30	5 | 10	5 | 10	100 | 200	**210,-**	965-228	70,-	963-128	88,-
with elevated display									
RIB 6K-3HM	3 | 6	1 | 2	1 | 2	20 | 40	**240,-**	965-228	70,-	963-128	88,-
RIB 10K-3HM	6 | 15	2 | 5	2 | 5	40 | 100	**240,-**	965-228	70,-	963-128	88,-
RIB 30K-2HM	15 | 30	5 | 10	5 | 10	100 | 200	**240,-**	965-228	70,-	963-128	88,-
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.									

Price computing scale KERN RPB

Sim. to illustration

FACE LIFT

Retail scale with memories for item prices

Features

- **NEW:** modern, ergonomic design and a housing which is even more compact, supporting efficient operation and saving space
- ① KERN RPB-HM: **Elevated display backlit,** revolving on column, height of stand approx. 480 mm, must be ordered at purchase
- ② KERN RPB-M: **Second display** on the rear of the balance
- **Three displays** for weight display (verifiable), reference weight, total weight
- **Calculation of change**
- **Memory (PLU) for 10 article prices**
- **Unit price can be switched** from €/kg to €/100 g
- **Auto-clear-key:** Unit price entry is automatically set to zero when scale is unloaded

- ③ **High mobility:** thanks to rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations
- **Protective working cover** included with delivery

Technical data

- Large backlit LCD displays, digit height 15 mm
- Dimensions weighing surface, stainless steel, W×D 204×263 mm
- Overall dimensions W×D×H
  KERN RPB-M: 270×310×65 mm
  KERN RPB-HM: 270×370×490 mm
- Net weight
  KERN RPB-M: approx. 3,5 kg
  KERN RPB-HM: approx. 4,2 kg
- Permissible ambient temperature -10 °C/40 °C

Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN CFS-A02S05, **€ 40,-**
- **Rechargeable battery pack internal**, operating time up to 80 h without backlight, charging time approx. 14 h, KERN GAB-A04, **€ 40,-**
- **Tare pan made of stainless steel**, ideal for weighing loose small parts, fruit, vegetables etc., W×D×H 370×240×20 mm, KERN RFS-A02, **€ 55,-**
- Further details, plenty of further accessories and suitable printers see *Accessories*

Application examples

- retail shops
- market places
- farm shops
- pick your own fruit and vegetable sales

Note: Official verification duty for commercial trade

STANDARD							OPTION		FACTORY
CAL EXT	MEMORY	RS 232	UNIT	RECIPE	MULTI	DMS	1 DAY	ACCU	DAkkS +3 DAYS	M +3 DAYS

Model	Weighing range	Readout	Verification value	Minimum load	Price excl. of VAT ex works	Options			
						Verification		DAkkS Calibr. Certificate	
KERN	[Max] kg	[d] g	[e] g	[Min] g	€	M Ⅲ KERN	€	DKD KERN	€
Dual-range balance switches automatically to the next largest weighing range [Max] and readout [d].									
RPB 6K1DM	3 | 6	1 | 2	1 | 2	20	**225,-**	965-228	70,-	963-128	88,-
RPB 15K2DM	6 | 15	2 | 5	2 | 5	40	**225,-**	965-228	70,-	963-128	88,-
RPB 30K5DM	15 | 30	5 | 10	5 | 10	100	**225,-**	965-228	70,-	963-128	88,-
with elevated display									
RPB 6K1DHM	3 | 6	1 | 2	1 | 2	20	**250,-**	965-228	70,-	963-128	88,-
RPB 15K2DHM	6 | 15	2 | 5	2 | 5	40	**250,-**	965-228	70,-	963-128	88,-
RPB 30K5DHM	15 | 30	5 | 10	5 | 10	100	**250,-**	965-228	70,-	963-128	88,-
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.									

Price computing scale KERN RFE

NEW

Compact portion scale with 2 XXL displays – weight, unit price, total price and TARE value at a glance

08

Features

- Ideal as a salad scale, sweet scale, check-weigher, portion scale
- **Large LCD display with four displays** for weight display (verifiable), unit price, total price and stored TARE or PRE-TARE value
- **TARE value display:** this shows a TARE or PRE-TARE value stored in a PLU, which enables this value to be stored in a legally binding way in accordance with the Weights and Measures Act
- 1 **Second display** on the rear of the balance
- 2 **Column** to elevate the display as standard, can be easily fitted or removed by the user. The power cable for the second display can be stored in the folding column which is hygienic and gives a tidy appearance. Column height approx. 395 mm
- 3 Thanks to easily-understandable, universal symbols e.g. for weight, TARE value, unit price, total price this balance can also be understood and operated easily all over the world

- **Calculation of change**
- **4 Direct price keys** for frequently recurring article prices
- **Memory (PLU) for 100 article prices**
- **Item description can be entered**, stored and shown on the display **in clear text**
- **Unit price can be switched** from €/kg to €/100 g, €/piece
- **Auto-clear-key:** Unit price entry is automatically set to zero when scale is unloaded
- **Headers and footers of the printout** can be programmed directly on the balance
- **High mobility:** thanks to rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations
- **Recessed grips on the underside** of the scale for easy transportation

Technical data

- Large backlit LCD display, digit height 20 mm
- Dimensions weighing surface, stainless steel, W×D 230×300 mm
- Overall dimensions W×D×H 320×450×130 mm
- Net weight approx. 4,2 kg
- Permissible ambient temperature -10 °C/40 °C

Accessories

- **Label printer** to print out weighing results on thermal labels, ASCII-capable, further details see *Accessories*, KERN YKE-01, **€ 590,-**

Application examples

- cafeterias, restaurants, motorway service stations
- retail shops
- market places
- farm shops
- pick your own fruit and vegetable sales

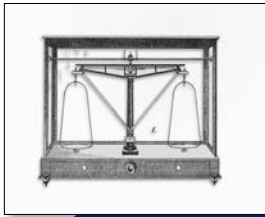**Note:** Official verification duty for commercial trade

STANDARD						OPTION		FACTORY
CAL EXT	MEMORY	RS 232	UNIT	MULTI	DMS	1 DAY	ACCU	DAkkS +3 DAYS	M +3 DAYS

Model KERN	Weighing range [Max] kg	Readout [d] g	Verification value [e] g	Minimum load [Min] g	Price excl. of VAT ex works €	Options			
						Verification		DAkkS Calibr. Certificate	
						M KERN	€	DKD KERN	€
RFE 6K3M	3 | 6	1 | 2	1 | 2	20	**295,-**	965-228	70,-	963-128	88,-
RFE 15K3M	6 | 15	2 | 5	2 | 5	40	**295,-**	965-228	70,-	963-128	88,-
RFE 30K3M	15 | 30	5 | 10	5 | 10	100	**295,-**	965-228	70,-	963-128	88,-
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.									

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

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DQS MED — Quality Management ISO 9001

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

German Excellence Group
Member