PROFESSIONAL MEASURING
SINCE 1844

KERN

Product brochure

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KERN PKS 4000-1

Flexible precision balance for laboratories and the pharmaceutical industry

ENGLISH



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APPLICATION EXAMPLE



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FEATURES

- Wide range of functions, including statistics function, weighing with tolerance range, counting and density determination function and many more
- Internal memory for complete recipes with name and target value of the recipe ingredients
- The different ingredients of a mixture can be weighed in with the recipe function. In the event of overdosing, recalculation is possible. User guidance through display
- Individual settings can be stored for up to 10 users. Restricted access for users who are not logged in
- Extensive range of variants with different dimensions and resolutions
- Standardised, convenient KERN concept of operation, consistency across products in terms of design, menu structure, button functions, interface connection and interface protocol
- The KERN Universal Port (KUP) enables the exchange of data and control commands using several interfaces such as USB, Bluetooth, WiFi or Ethernet using the plug-and-play principle
- KERN Communication Protocol (KCP): The KCP permits searching and remote control of the balance using external control devices or computers
- GLP/ISO record keeping with date, time and identification number of balance adjustment or weighing process
- USB host compatible for easy operation using a USB keyboard or barcode scanner, e.g. for navigating through the menu or entering recipe data
- Additional data can be entered quickly and conveniently using the keyboard, for example batch IDs, in order to assign weights to specific batches or similar and make them traceable
- As an alternative to a keyboard, the user can connect other devices, for example a barcode scanner, using a USB host
- CAL adjustment program for adjusting precision, external test weights available separately

TECHNICAL DATA

- LCD graphic-Display with help text for simplified user guidance, digit height 21 mm
- Dimensions weighing surface, stainless steel, W×D 180×170 mm
- Overall dimensions 315×205×95 mm
- Net weight approx. 2,4 kg
- Permissible ambient temperature 5 °C/35 °C

MAIN SCOPE OF APPLICATIONS

- Laboratories
- Pharmaceutical industry
- Quality laboratories

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PICTOGRAMS

Standard



Option



MODEL OVERVIEW

Model	Weighing capacity [Max]	Readability [d]	Reproducibility	Linearity	Dimensions weighing surface
PKS 300-2	300 g	0,01 g	0,01 g	± 0,02 g	131×131 mm
PKS 600-2	600 g	0,01 g	0,01 g	± 0,03 g	131×131 mm
PKS 1000-1	1200 g	0,1 g	0,1 g	± 0,3 g	131×131 mm
PKS 2000-1	2500 g	0,1 g	0,1 g	± 0,3 g	131×131 mm
PKS 4000-1	4200 g	0,1 g	0,1 g	± 0,2 g	180×170 mm
PKS 6000-0	6200 g	1 g	1 g	± 2 g	180×170 mm
PKS 6000-1	6200 g	0,1 g	0,1 g	± 0,2 g	180×170 mm
PKS 10K-4	10000 g	0,1 g	0,1 g	± 0,2 g	180×170 mm
PKS 10K-5	10000 g	0,05 g	0,05 g	± 0,15 g	180×170 mm

ACCESSORIES

Model	Description
CFS-A03	Signal lamp KERN CFS-A03
KUP-01	RS-232 interface KUP-01
KUP-03	Interface USB-Device KUP-03
KUP-04	Ethernet interface KUP-04
KUP-05	WiFi interface KUP-05
KUP-06	Bluetooth BLE interface KUP-06
KUP-13	Extension box KUP-13
YBA-A11	Protective working cover YBA-A11
YBA-A11S05	Protective working cover YBA-A11S05, scope of delivery: 5 items
YKA-27	Power adapter YKA-27 (5,9V, 1A | 100 V - 240 V, 50 / 60 Hz | EURO, UK, US, CH)
YKC-01	Thermal printer YKC-01
YKG-01	Dot Matrix Printer YKG-01
YKH-01	Thermal printer YKH-01
YKR-01	Rechargeable battery pack YKR-01
YKT-01	Needle printer YKT-01
YKX-A10	USB keyboard YKX-A10
YKX-A20	USB keyboard YKX-A20
YKX-A30	Barcode scanner YKX-A30

SOFTWARE

Model	Description
SCD-4.0-DL	Software SCD-4.0-DL (Scope of supplies: Download link for 1 license)
SCD-4.0-DLS05	Software SCD-4.0-DLS05 (Scope of supplies: Download link for 5 licenses)
SCD-4.0-PRO-DL	Software SCD-4.0-PRO-DL (Scope of supplies: Download link for 1 license)
SCD-4.0-PRO-DL-AS05	Software SCD-4.0-PRO-DL-AS05 (Scope of supplies: Download link for 5 licenses)
SET-01	Software KERN EasyTouch SET-01-2025a Base
SET-01	Software KERN EasyTouch SET-01 Base
SET-04	Software KERN EasyTouch SET-04-2025a Density
SET-04	Software KERN EasyTouch SET-04 Density
SET-05	Software KERN EasyTouch SET-05-2025a Dynamic

Model	Description
SET-05	Software KERN EasyTouch SET-05 Dynamic
SET-06	Software KERN EasyTouch SET-06-2025a Classification
SET-06	Software KERN EasyTouch SET-06 Classification
SET-07	Software KERN EasyTouch SET-07-2025a Variable
SET-07	Software KERN EasyTouch SET-07 Variable
SET-08	Software KERN EasyTouch SET-08-2025a Take-out
SET-08	Software KERN EasyTouch SET-08 Take-out
SET-10	Software KERN EasyTouch SET-10 Save Server
SET-11	Software KERN EasyTouch SET-11-2025a Safety
SET-11	Software KERN EasyTouch SET-11 Safety
SET-14	Software KERN EasyTouch SET-14-2025a Individual Print
SET-14	Software KERN EasyTouch SET-14 Individual Print
SET-16	Software KERN EasyTouch SET-16-2025a Batch and Statistics
SET-16	Software KERN EasyTouch SET-16 Batch and Statistics
SET-17	Software KERN EasyTouch SET-17-2025a PrePack
SET-17	Software KERN EasyTouch SET-17 PrePack
SET-18	Software KERN EasyTouch SET-18-2025a Container Master
SET-18	Software KERN EasyTouch SET-18 Container Master
SET-21	Software KERN EasyTouch SET-21-2025a Formulation
SET-21	Software KERN EasyTouch SET-21 Formulation
SET-22	Software KERN EasyTouch SET-22-2025a Difference
SET-22	Software KERN EasyTouch SET-22 Difference
SET-31	Software KERN EasyTouch SET-31-2025a Tolerance
SET-31	Software KERN EasyTouch SET-31 Tolerance
SET-32	Software KERN EasyTouch SET-32-2025a Count
SET-32	Software KERN EasyTouch SET-32 Count
SET-33	Software KERN EasyTouch SET-33-2025a Target Count
SET-33	Software KERN EasyTouch SET-33 Target Count
SET-35	Software KERN EasyTouch SET-35-2025a Assembly Count
SET-35	Software KERN EasyTouch SET-35 Assembly Count
SET-37	Software KERN EasyTouch SET-37-2025a Export Manager

Model	Description
SET-37	Software KERN EasyTouch SET-37 Export Manager
SET-39	Software KERN EasyTouch SET-39 Data Interface
SET-40	Software KERN EasyTouch SET-40 Protect
SET-46	Software KERN EasyTouch SET-46-2025a Backup Scheduler
SET-46	Software KERN EasyTouch SET-46 Backup Scheduler
SET-51	Software KERN EasyTouch SET-51-2025a Audit Logs
SET-51	Software KERN EasyTouch SET-51 Audit Logs
SET-52	Software KERN EasyTouch SET-52-2025a Inventory
SET-52	Software KERN EasyTouch SET-52 Inventory
SET-261	Software KERN EasyTouch SET-261 Audio Management
SET-311	Software KERN EasyTouch SET-311-2025a Quick Key
SET-311	Software KERN EasyTouch SET-311 Quick Key
SET-411	Software KERN EasyTouch SET-411-2025a Hotkeys
SET-411	Software KERN EasyTouch SET-411 Hotkeys

SERVICES

Model	Description
961-247	Adjustment at the location of installation 961-247 (Not in combination with verification)
963-127	DAkkS calibration certificate 963-127
969-517	Confirmation of the manufacturer’s specification (only in combination with DAkkS calibration certificate)969-517
970-017	Warranty extension (+3 years) 970-017

KERN Pictogram Overview

	External adjustment: Adjusting accuracy using external adjustment weight
	Memory: Device-internal memory capacity, e.g. for article data, measuring data, tare weights, PLU etc.
	KERN IoT-Line balances – smart weighing solutions for the digital future
	Statistics: using the saved values, the device calculates statistical data, such as average value, standard deviation etc.
	KERN Universal Port (KUP): allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, USB, Bluetooth, WiFi, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort
	KERN Communication Protocol (KCP): 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
	GLP/ISO protocol: The measuring device generates a GLP-compliant printout
	Value & time: The measuring device displays the value, date, and time, regardless of the connected printer
	Piece counting: Reference quantities selectable. Display can be switched from piece to weight
	Formulation: Internal memory for complete recipes with name and target value of recipe components. Display-supported user guidance
	Sum function: The weight values of weighed items can be added together and the total printed out
	User management: The measuring device allows password-protected user profiles with different authorization levels to be created
	Percentage determination: determining the deviation in % from the target value (100 %)
	Units can be switched to e.g. non-metric units
	Measuring with tolerance range (checkweighing): Upper and lower limit values can be programmed, e.g. for sorting, portioning or for measuring coatings or material thicknesses. The process is supported by an acoustic and/or optical signal
	Hold function: When the weighing conditions are unstable, a stable weight is calculated as an average value
	Suspended weighing: Load support with hook on the underside of the balance
	Battery operation: Ready for battery operation
	Universal plug-in power supply: With universal input and optional input socket adapters for EU, CH, GB or EU, CH, GB, US or EU, CH, GB, US, AUS
	Weighing principle Strain gauges: Electrical resistor on an elastic deforming body
	Package shipment by courier service: The duration of internal product provision is one day
	EasyTouch: Suitable for the connection, data transmission and control through PC or tablet
	Data interface RS-232: For connection to printers, PCs or other peripheral devices for data transfer over longer distances. Network in bus topology possible

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	Data Interface USB: For connection to printers, PCs or other peripheral devices
	Data interface Bluetooth: For connection to printers, PCs or other peripheral devices
	Data interface WiFi: For data transfer to printers, PCs or other peripheral devices
	Network interface: For connecting the measuring device to an Ethernet network
	Rechargeable battery pack: Rechargeable set
DAkkS	Accredited calibration (DKD): The duration of the accredited calibration is 3 working days