

NEW



Precision balance with flexible functionality and touch display



The modern touch display enables convenient operation



Also available with a larger weighing surface



In a GLP-compliant print protocol all weights can be documented, including date, time and identification number.

Features

- The wide range of functions of this range of precision balances means that they qualify for use in the pharmaceutical industry as well as other fields. These include, for example, the statistical function, weighing with tolerance range, counting function, percentage weighing, totalizing function and many more
- Modern touch display with convenient operation enables you to, for example, switch the units or start adjustment straight from the display
- The Windows Direct function allows weights to be transferred directly from the balance to a Windows application via a USB device connection, without the need for manual entry
- Draught shield standard for models with [d] = 0,001 g, weighing space W×D×H 174×162×228 mm
- GLP/ISO record keeping with date, time and identification number of balance adjustment or weighing process
- Assists in data integrity in accordance with U.S. FDA 21 Part 11 (for example weighing result, sample ID, user name, scales ID, ...)
- KERN Communication Protocol (KCP): The KCP permits searching and remote control of the balance using external control devices or computers, see page 19
- Underfloor weighing: load support on the underside of the balance for models. Loop for underfloor weighing, standard
- RS 232 data interface and USB (Device) for the transfer of weighing data
- Menu language EN

Technical data

- Backlit LCD display, digit height 20 mm
- Dimensions weighing surface, stainless steel
 - A** ∅ 115 mm
 - B** W×D 185×185 mm
- Overall dimensions W×D×H
 - A** 207×318×360 mm
 - B** 207×318×110 mm
- Permissible ambient temperature 15 °C/25 °C

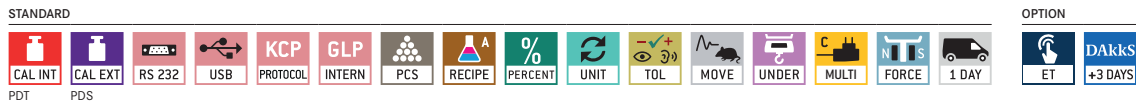
Accessories

- Protective dust cover, KERN ABS-A08
- Weighing table to absorb vibrations and oscillations, which would otherwise distort the weighing result, KERN YPS-03
- Antivibration plate 400×450×60 mm, KERN YPS-04 565×450×60 mm, KERN YPS-05
- Ioniser to neutralise electrostatic charge, KERN ABP-A01
- Equipment qualification: compliant qualification concept with Installation and Operating Qualification (IQ, OQ), for details see page 222
- Further details, plenty of further accessories and suitable printers see *Accessories*

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The main scope of applications is:

- Laboratories
- Pharmaceutical industry
- Chemical industry
- Food industry
- Plastics industry
- Quality laboratories



Model	Weighing capacity [Max]	Readability [d]	Reproducibility	Linearity	Net weight	Weighing plate	Options
							DAKKS Calibr. Certificate
KERN	g	g	g	g	kg		DAKKS KERN
Models with external adjustment							
PDS 300-3	320	0,001	0,003	± 0,003	6	A	963-127
PDS 600-3	620	0,001	0,003	± 0,003	6	A	963-103
PDS 1000-3	1020	0,001	0,004	± 0,005	6	A	963-103
PDS 2000-2	2200	0,01	0,03	± 0,03	3,6	B	963-127
PDS 4000-2	4200	0,01	0,03	± 0,03	3,6	B	963-127
PDS 6000-2	6200	0,01	0,03	± 0,03	3,6	B	963-104
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PDT 600-3	620	0,001	0,003	± 0,003	6	A	963-103
PDT 1000-3	1020	0,001	0,004	± 0,005	6	A	963-103
PDT 2000-2	2200	0,01	0,03	± 0,03	3,6	B	963-127
PDT 4000-2	4200	0,01	0,03	± 0,03	3,6	B	963-127
PDT 6000-2	6200	0,01	0,03	± 0,03	3,6	B	963-104

KERN Pictograms



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



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



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



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.



KERN Universal Port (KUP)
allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WIFI, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort



RS-232 Data interface
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. Suitable for data transfer 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



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



GLP/ISO log intern
The balance displays weight, date and time, independent of a printer connection



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



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



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



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



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



Weighing units
Can be switched to e.g. nonmetric units. See 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
(Animal weighing program)
When the weighing conditions are unstable, a stable weight is calculated as an average value



Protection against dust and water splashes IPxx
The type of protection is shown in the pictogram



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



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



Rechargeable battery pack
Rechargeable set



Universal plug-in power supply
with universal input and optional input socket adapters for
A) EU, CH, GB
B) EU, CH, GB, US
C) EU, CH, GB, US, AUS



Plug-in power supply
230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available



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



Weighing principle Strain gauges
Electrical resistor on an elastic deforming body



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



Conformity Assessment
The time required for conformity assessment 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 is shown in days in the pictogram

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