PROFESSIONAL MEASURING
SINCE 1844

KERN

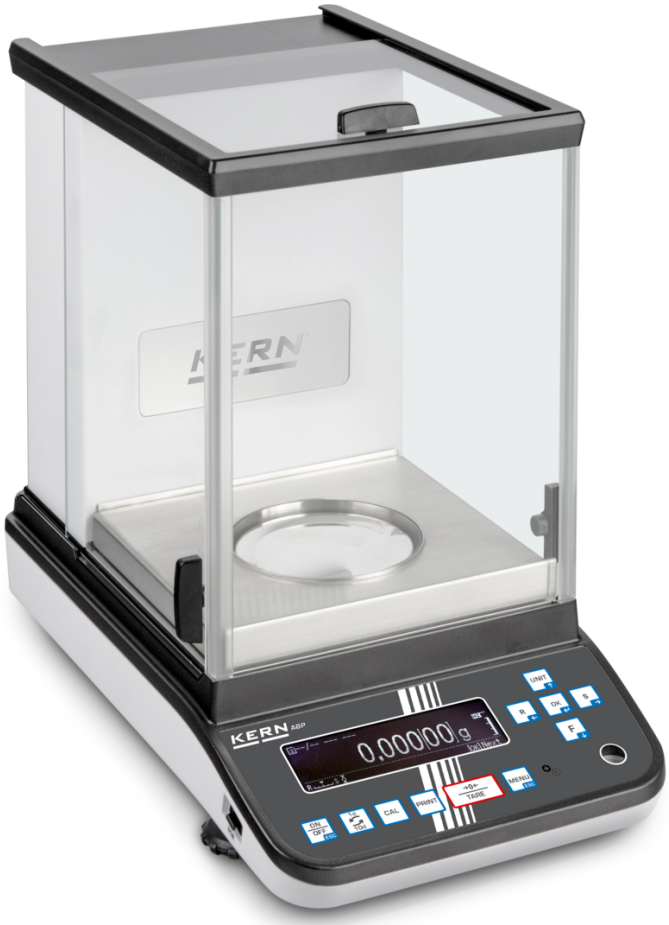
Product brochure

31.10.2026

KERN ABP 100-5M

Premium single-range semi-micro balance with unbelievably high resolution and the latest Single-Cell Generation for extremely rapid and stable weighing results

ENGLISH



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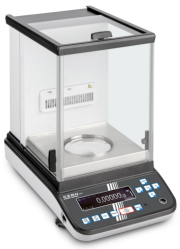




APPLICATION EXAMPLE







FEATURES

- This new generation of analytical balances combines the highest level of precision with large weighing ranges. Thanks to the new Single-Cell Generation, the weighing result is displayed in a fraction of the time with comparable models. Together with the intuitively structured menu, this means that you can work efficiently and rapidly
- Navigation pad for quick navigating through the menus
- Automatic internal adjustment in the case of a change in temperature ≥ 1 °C or timecontrolled every 4 h, guarantees high degree of accuracy and makes the balance independent of its location of use
- The minimum weight of sample can be manually stored in the device or automatically calculated. For weighings below this value, the balance issues a warning message
- Dosage aid: High stability mode and other filter settings can be selected
- Simple recipe weighing and documenting with a combined tare/print function. In addition, the ingredients for the recipe are numbered automatically and printed out with their corresponding number and nominal weight
- Individual user settings can be stored for up to 10 users: user name/number (can be printed out or added to the record for each process), password, menu language, user profiles, accessing user settings via barcode, additional guest mode for users who are not logged in, authorizations, eg. B. balance adjustment, changing settings or conditioning or modification of a recipe only by the authorized person and performing the formulation by the user
- RS-232 data interfaces and USB (device) for transferring weighing data and USB (host) to connect a USB keyboard for easy capture of item numbers, recipes, for easier navigation within the menu etc.
- U.S. FDA 21 Part 11: assists in data integrity in accordance with U.S. FDA 21 Part 11 (for example weighing result, sample ID, user name, scales ID, ...)
- Menu languages DE, EN
- Automatic data output to the PC/printer each time the balance is steady
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- [d] = 0,0001 g: Multi-function weighing plate included with delivery, minimises the effect of currents of air in the weighing chamber and therefore significantly improves the stabilisation time and repeatability. In addition samples, sample paper, PCR containers, micro centrifuge tubes and many other items which protrude can be easily fixed in place and weighed easily
- Protective working cover included with delivery

TECHNICAL DATA

- Luminescent OLED display, digit height 12 mm bright with high contrast, for easy reading of the weight, even in poor lighting conditions
- Dimensions weighing surface, stainless steel, ⌀ 91 mm
- Overall dimensions W×D×H
- Net weight approx. 8 kg
- Permissible ambient temperature 10 °C/30 °C

MAIN SCOPE OF APPLICATIONS

- Pharmaceutical applications
- Quality control
- Research and development
- Chemical industry
- Industry and production

PLEASE NOTE FOR YOUR ORDER

- For devices that require verification (conformity assessment according to NAWI 2014/31/EU), please include the verification when placing your order, the initial verification is not possible after delivery. Please inform the full address of the location of use for the initial verification

PICTOGRAMS

Standard



Option



Factory



MODEL OVERVIEW

Model	Weighing capacity [Max]	Readability [d]	Verification value [e]	Minimal load [Min]	Reproducibility	Linearity	Dimensions weighing surface
ABP 100-5DM	52 g; 120 g	0,00001 g; 0,0001 g	0,001 g; 0,001 g	0,001 g	0,00002 g; 0,0001 g	± 0,00005 g; 0,0002 g	91 mm
ABP 200-5DM	102 g; 220 g	0,00001 g; 0,0001 g	0,001 g; 0,001 g	0,001 g	0,00005 g; 0,0001 g	± 0,0001 g; 0,0002 g	91 mm
ABP 100-4M	120 g	0,0001 g	0,001 g	0,01 g	0,0001 g	± 0,0002 g	91 mm
ABP 100-5M	135 g	0,00001 g	0,001 g	0,001 g	0,00005 g	± 0,0001 g	91 mm
ABP 200-4M	220 g	0,0001 g	0,001 g	0,01 g	0,0001 g	± 0,0002 g	91 mm
ABP 200-5M	220 g	0,00001 g	0,001 g	0,001 g	0,000015 g; 0,00003 g; 0,00005 g	± 0,0001 g	91 mm
ABP 300-4M	320 g	0,0001 g	0,001 g	0,01 g	0,00015 g	± 0,0003 g	91 mm

ACCESSORIES

Model	Description
315-107-103	Safety set 315-107-103, included weight 5 g (E2); 100 g (E2)
ABP-A01	Ioniser ABP-A01
ABP-A02	Draft shield ABP-A02
ABS-A08	Protective dust cover ABS-A08
DBS-A04	USB 2.0 cable DBS-A04
MLB-A05	RS232 interface cable MLB-A05
YBA-A06	Protective working cover YBA-A06
YBA-A06S05	Protective working cover YBA-A06S05, scope of delivery: 5 items
YDB-03	Density determination set YDB-03
YKC-01	Thermal printer YKC-01
YKG-01	Dot Matrix Printer YKG-01
YKH-01	Thermal printer YKH-01
YKI-10	RS232-Ethernet adapter YKI-10 (RS-232 standard, Ethernet, RS-485)
YKI-11	RS232-Ethernet adapter YKI-11 (Ethernet, RS-232 standard - 2x)
YKI-12	RS232-WiFi adapter YKI-12
YKT-01	Needle printer YKT-01
YKX-A01	USB keyboard YKX-A01
YKX-A03	USB barcode scanner YKX-A03
YPS-03	Antivibration table YPS-03
YPS-04	Anti-vibration plate KERN YPS-04 (400×450×60 mm, 30 kg)
YPS-05	Anti-vibration plate KERN YPS-05 (565×450×60 mm, 42 kg)

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)

SERVICES

Model	Description
963-101	DAkkS calibration certificate 963-101
965-201	Verification / Conformity assessment according to NAWI (2014/31/EU) 965-201
965-411	Assembly of components 965-411 (< 50kg)
969-517	Confirmation of the manufacturer's specification (only in combination with DAkkS calibration certificate)969-517
970-114	Warranty extension (+2 years) 970-114

KERN Pictogram Overview

	Internal adjustment: Adjusting accuracy using internal adjustment weight
	Data interface RS-232: For connection to printers, PCs or other peripheral devices for data transfer over longer distances. Network in bus topology possible
	Data Interface USB: For connection to printers, PCs or other peripheral devices
	User management: The measuring device allows password-protected user profiles with different authorization levels to be created
	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
	Density determination: The density of liquids and solids with a density of ≤ /≥ 1 is determined directly in the measuring device
	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
	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 single cell technology: Advanced version of the force compensation principle with the highest level of precision
	Package shipment by courier service: The duration of internal product provision is one day
	Accredited calibration (DKD): The duration of the accredited calibration is 3 working days
	Conformity assessment: The duration of the conformity assessment is 3 working days

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