

4



ANALYTICAL BALANCES

Quick-Finder Analytical Balances

Readout	Weighing range	Model	Page	M	↕	⚖	RS 232	🔌	GLP	🧪
[d]	[Max]	KERN		For an explanation on the pictos, see the front flap						
mg	g									
0,01 0,1	52 120	ABP 100-5DM	44	○	●	●	●	●	●	●
0,01 0,1	52 120	ABP 100-5DAM	46	○	●	●	●	●	●	●
0,01 0,1	82 220	ALJ 200-5DA	40			●		●	●	●
0,01 0,1	102 220	ABP 200-5DM	44	○	●	●	●	●	●	●
0,01 0,1	102 220	ABP 200-5DAM	46	○	●	●	●	●	●	●
0,01	135	ABP 100-5M	44	○	●	●	●	●	●	●
0,01	135	ABP 100-5AM	46	○	●	●	●	●	●	●
0,01	210	ALJ 210-5A	40		●			●	●	●
0,01	220	ABP 200-5M	44	○	●	●	●	●	●	●
0,01	220	ABP 200-5AM	46	○	●	●	●	●	●	●
0,1	82	ACS 80-4	42			●	●	●	●	●
0,1	82	ACJ 80-4M	42	○	●	●	●	●	●	●
0,1	120	ADB 100-4	39			●	●			
0,1	120	ADJ 100-4	39		●		●			
0,1	120	ACS 100-4	42			●	●	●	●	●
0,1	120	ACJ 100-4M	42	○	●	●	●	●	●	●
0,1	120	ADS 100-4	43			●	●	●	●	●
0,1	120	ADT 100-4	43		●		●	●	●	●
0,1	120	ABP 100-4M	44	○	●	●	●	●	●	●
0,1	160	ALS 160-4A	40			●	●	●	●	●
0,1	160	ALJ 160-4A	40		●		●	●	●	●
0,1	220	ADB 200-4	39			●	●			
0,1	220	ADJ 200-4	39		●		●			
0,1	220	ACS 200-4	42			●	●	●	●	●
0,1	220	ACJ 200-4M	42	○	●	●	●	●	●	●
0,1	220	ADS 200-4	43			●	●	●	●	●
0,1	220	ADT 200-4	43		●		●	●	●	●
0,1	220	ABP 200-4M	44	○	●	●	●	●	●	●
0,1	220	ABP 200-4AM	46	○	●	●	●	●	●	●
0,1	250	ALS 250-4A	40			●	●	●	●	●
0,1	250	ALJ 250-4A	40		●		●	●	●	●
0,1	310	ALJ 310-4A	40		●		●	●	●	●
0,1	320	ACS 300-4	42			●	●	●	●	●
0,1	320	ACJ 300-4M	42	○	●	●	●	●	●	●
0,1	320	ADS 300-4	43			●	●	●	●	●
0,1	320	ADT 300-4	43		●		●	●	●	●
0,1	320	ABP 300-4M	44	○	●	●	●	●	●	●
0,1	320	ABP 300-4AM	46	○	●	●	●	●	●	●
0,1	510	ALJ 500-4A	40		●		●	●	●	●
0,001 ct	600 ct	ADB 600-C3	39			●	●			
0,001 ct	600 ct	ADJ 600-C3	39		●		●			

● Standard ○ Option



Discover more details and matching accessories online!

The price leader in analytical balances, with internal or external adjustment

Features

- KERN ADJ: Automatic internal adjustment in the case of a change in temperature $\geq 2\text{ }^{\circ}\text{C}$ or time-controlled every 3 h, guarantees high degree of accuracy and makes the balance independent of its location of use
- KERN ADB: Adjusting program CAL for quick setting of the balance accuracy, external test weights at an additional price, see *test weights*
- Glass draught shield with 3 sliding doors for easy access to the items being weighed standard
- **1** ADB 600-C3/ADJ 600-C3: Compact, space-saving carat balances with a readout of 0.001 ct and a weighing range of 600 ct. The high level of accuracy saves hard cash wherever you are weighing valuable precious stones
- Level indicator and levelling feet for precise levelling of the scale, fitted as standard, to give the most accurate weighing result
- Simple and convenient 6-key operation

Technical data

- Large backlit LCD display
- Dimensions weighing surface, stainless steel, $\varnothing 90\text{ mm}$
- weighing space W×D×H
KERN ADB-C/ADJ-C: 170×160×110 mm
KERN ADB/ADJ: 170×160×205 mm
- Permissible ambient temperature 10 °C/30 °C

STANDARD



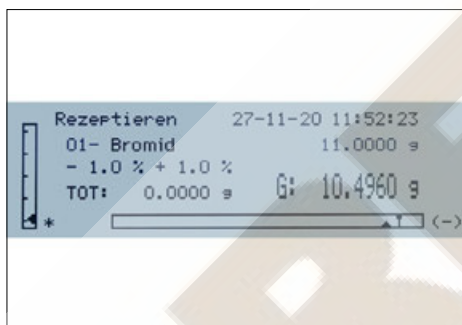
OPTION



Model	Weighing capacity [Max]	Readability [d]	Reproducibility	Linearity	Overall dimensions W×D×H mm	Net weight kg	Options
							Calibr. Certificate DAkkS accr. KERN
KERN	g	mg	mg	mg			
ADB 100-4	120	0,1	0,2	$\pm 0,4$	230×310×330	4,4	963-101
ADB 200-4	220	0,1	0,2	$\pm 0,4$	230×310×330	4,4	963-101
ADB 600-C3	600 ct	0,001 ct	0,002 ct	$\pm 0,004\text{ ct}$	230×310×210	3,8	963-101
ADJ 100-4	120	0,1	0,2	$\pm 0,4$	230×310×330	5,0	963-101
ADJ 200-4	220	0,1	0,2	$\pm 0,4$	230×310×330	5,0	963-101
ADJ 600-C3	600 ct	0,001 ct	0,002 ct	$\pm 0,004\text{ ct}$	230×310×210	4,6	963-101



Analytical balances with a large weighing range, graphics display and user-friendly recipe weighing function – also as single-range semi-micro balance with unbelievably high resolution



Convenient recipe-weighing with the recipe database, up to 99 recipes can be stored, each with up to 20 recipe ingredients with name and target value



Clear printout with date and time. In addition, the components of the mixture are numbered automatically and printed out with the name and weight



GLP/ISO record keeping: professional, detailed GLP Protocol, so that the balance is completely compliant with the relevant standard requirements in accordance with ISO, GLP and GMP



Discover more details and matching accessories online!

Features

- ALJ 210-5A: Semi-micro model with just one weighing range with unbelievably high resolution. **1** Particularly advantageous: the ioniser KERN ALJ-A03 for neutralising electrostatic charge is already fitted as standard
- Rapid working thanks to the graphics display and user-friendly, clear user guidance in German, English, French, Italian, Spanish and Portuguese
- KERN ALJ: Automatic internal adjustment, guarantees high degree of accuracy and makes the balance independent of its location of use
- KERN ALS: Adjusting program CAL for quick setting of the balance accuracy using an external test weight at an additional price, see *test weights*
- Short stabilisation time: steady weight values within approx. 4 s (Models with [d] = 0,1 mg) 10 s; 6 s (Models with [d] = 0,01 | 0,1 mg) under laboratory conditions

- Weighing with tolerance range: a visual and audible signal helps with portioning, dispensing or grading
- Dosage aid: High stability mode and other filter settings can be selected
- Internal memory for complete recipes with name and target value of the recipe ingredients
- Ergonomically optimised keypad for left and righthanded users
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed. weighing space W×D×H 160×170×225 mm
- Compact size
- Protective working cover included with delivery

Technical data

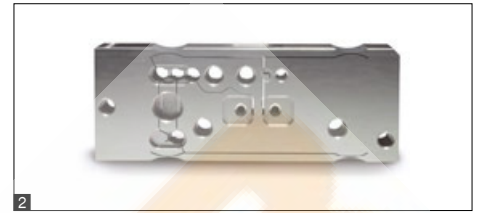
- Backlit LCD graphic display, digit height 15 mm
- Dimensions weighing surface, stainless steel, Ø 80 mm
- Overall dimensions W×D×H 210×340×330 mm
- Permissible ambient temperature 5 °C/35 °C

2 KERN ALJ 200-5DA with optional ioniser **1**, see *internet*. High-precision semi-micro analytical balance. Thanks to its high level of precision, it is ideal for calibrating pipettes
Note: To prevent evaporation we recommend economical capillary tubes (see standard 8655)

STANDARD OPTION

DAkks

Model	Weighing capacity [Max] g	Readability [d] mg	Reproducibility mg	Linearity mg	Net weight kg	Options
						Calibr. Certificate DAkks accr. KERN
KERN						
ALS 160-4A	160	0,1	0,1	± 0,3	7	963-101
ALS 250-4A	250	0,1	0,1	± 0,3	7	963-101
ALJ 210-5A	210	0,01	0,05	± 0,1	6	963-101
ALJ 160-4A	160	0,1	0,1	± 0,3	7	963-101
ALJ 250-4A	250	0,1	0,1	± 0,3	7	963-101
ALJ 310-4A	310	0,1	0,1	± 0,3	7	963-101
ALJ 500-4A	510	0,1	0,2	± 0,4	7	963-101
Multi-range balance, with increasing load it switches automatically to the next largest weighing range [Max] and readout [d] and when the load is fully removed, the balance switches back to the lower range						
ALJ 200-5DA	82 220	0,01 0,1	0,04 0,1	± 0,1 0,2	7	963-101



Discover more details and matching accessories online!

The bestseller in analytical balances, with high-quality single-cell weighing system, verification optional

Features

- KERN ACJ: Automatic internal adjustment in the case of a change in temperature $\geq 2\text{ }^{\circ}\text{C}$ or time-controlled every 4 h, guarantees high degree of accuracy and makes the balance independent of its location of use
- KERN ACS: Adjusting program CAL for quick setting of the balance accuracy, external test weights at an additional price, see *test weights*
- 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

- Automatic data output to the PC/printer each time the balance is steady
- Identification number: 4 digits, printed on calibration protocol freely programmable
- USB data interfaces and RS-232 for transferring weighing data to the PC, tablet, printer or USB
- Protective working cover included with delivery

Technical data

- Large LCD display, digit height 14 mm
- Dimensions weighing surface, stainless steel, $\varnothing 91\text{ mm}$
- weighing space W×D×H 174×162×227 mm
- Overall dimensions W×D×H 213×333×338 mm
- Net weight approx. 7 kg
- Permissible ambient temperature 10 °C/30 °C

Single-cell advanced technology:

- Fully automatic manufactured weighing cell from one piece of material
- Stable temperature behaviour
 - Short stabilisation time: steady weight values within approx. 3 s under laboratory conditions
 - Shock proof construction
 - High corner load performance

STANDARD



OPTION



FACTORY

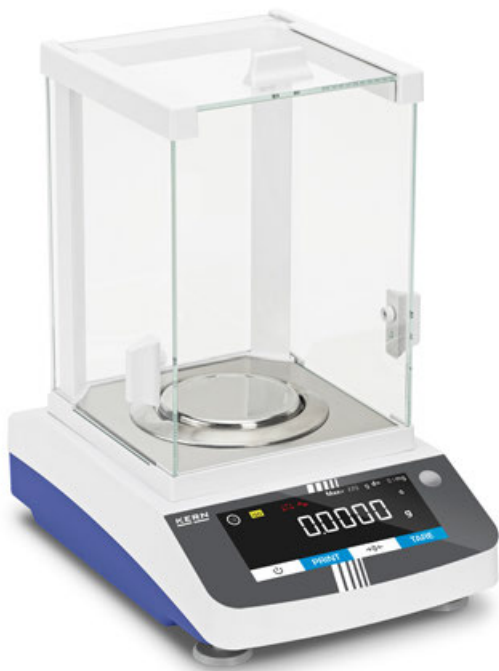


Model	Weighing capacity [Max]	Readability	Verification value	Minimal load	Reproducibility	Linearity	Options	
							Verification	Calibr. Certificate
KERN	g	[d] mg	[e] mg	[Min] mg	mg	mg	MI KERN	DAkkS accr. KERN
ACS 80-4	82	0,1	-	-	0,2	$\pm 0,3$	-	963-101
ACS 100-4	120	0,1	-	-	0,2	$\pm 0,3$	-	963-101
ACS 200-4	220	0,1	-	-	0,2	$\pm 0,3$	-	963-101
ACS 300-4	320	0,1	-	-	0,2	$\pm 0,3$	-	963-101

Note: 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.

ACJ 80-4M	82	0,1	1	10	0,2	$\pm 0,3$	965-201	963-101
ACJ 100-4M	120	0,1	1	10	0,2	$\pm 0,3$	965-201	963-101
ACJ 200-4M	220	0,1	1	10	0,2	$\pm 0,3$	965-201	963-101
ACJ 300-4M	320	0,1	1	10	0,2	$\pm 0,3$	965-201	963-101



Discover more details and matching accessories online!

Analytical balance with flexible functionality and touch display

Features

- The wide range of functions of this range of analytical 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
- **1** 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

- Specialised functions, such as the statistical function make it easier to use efficiently in industry and the laboratory
- 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, ...)
- Data query and remote control of the balance using a computer or CRM/ERP systems using the KERN Communication Protocol, see page 19
- RS-232 data interface and USB (Device) for the transfer of weighing data
- Menu language EN

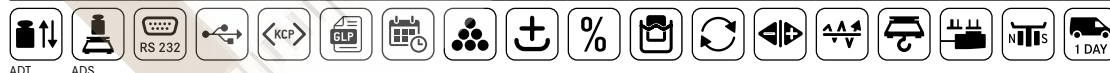
Technical data

- Backlit LCD display, digit height 20 mm
- Dimensions weighing surface, stainless steel, \varnothing 90 mm
- Overall dimensions WxDxH 207x318x360 mm
- Net weight approx. 6 kg
- Permissible ambient temperature 15 °C/25 °C

Main scope of applications

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

STANDARD



OPTION



Model	Weighing capacity [Max] g	Readability [d] mg	Reproducibility mg	Linearity mg	Options
					Calibr. Certificate DAkkS accr. KERN
Models with external adjustment					
ADS 100-4	120	0,1	0,3	± 0,3	963-101
ADS 200-4	220	0,1	0,3	± 0,3	963-101
ADS 300-4	320	0,1	0,4	± 0,4	963-101
Models with internal adjustment					
ADT 100-4	120	0,1	0,3	± 0,3	963-101
ADT 200-4	220	0,1	0,3	± 0,3	963-101
ADT 300-4	320	0,1	0,4	± 0,4	963-101



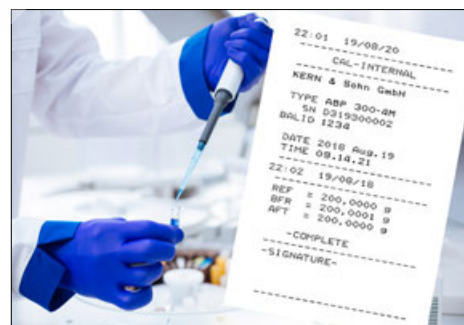
Premium analytical balance with the latest Single-Cell Generation for extremely rapid, stable weighing results



Option: The internal draught shield minimises the effect of currents of air in the weighing chamber and therefore significantly improves the stabilisation time and repeatability, see *internet*



Option: Extremely fast ionization process, thanks to the latest generation of KERN ionization technology to neutralise electrostatic charge, see *internet*



GLP/ISO record keeping: professional, detailed GLP Protocol, so that the balance is completely compliant with the relevant standard requirements in accordance with ISO, GLP and GMP

Features

- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Navigation pad for quick navigating through the menus
- Automatic internal adjustment in the case of a change in temperature $\geq 1\text{ }^\circ\text{C}$ 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 settings can be stored for up to 10 users: User name/number, password, menu language, user profile. Settings can be recalled using the barcode. Guest mode for users who are not logged in, specific permissions (e.g. for adjustment, recipe changes) only for authorised users
- RS-232 data interfaces and USB (device) for transferring weighing data and USB (host) to connect a USB keyboard
- 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
- Standard for models with [d] 0,01 mg: 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
- ABP 200-5M: Erlenmeyer flask holder included with delivery
- Protective working cover included with delivery

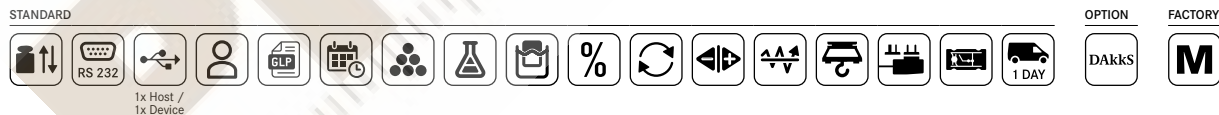
Technical data

- 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, $\varnothing 91\text{ mm}$
- Overall dimensions WxDxH 220x370x350 mm
- Net weight approx. 8 kg
- Permissible ambient temperature $10\text{ }^\circ\text{C}/30\text{ }^\circ\text{C}$

Discover more details and matching accessories online!

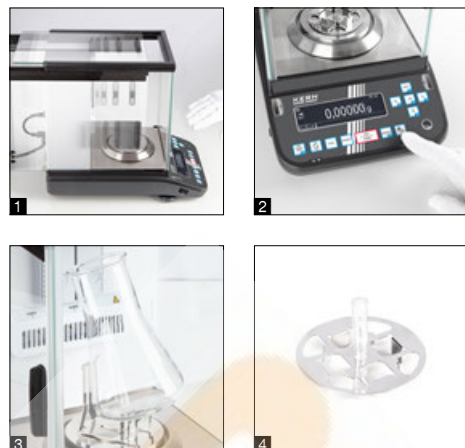
Single-cell advanced technology:

- Fully automatic manufactured weighing cell from one piece of material
- Stable temperature behaviour
 - Short stabilisation time: steady weight values within approx. 2 s (models with [d] = 0,1 mg), approx. 8 s (models with [d] = 0,01 mg) under laboratory conditions
 - Shock proof construction
 - High corner load performance



Model	Weighing capacity [Max] g	Readability [d] mg	Verification value [e] mg	Minimal load [Min] mg	Reproducibility mg	Linearity mg	Options	
							Verification	Calibr. Certificate
KERN							M KERN	DAkKS acc. KERN
ABP 100-5M	135	0,01	1	1	0,05	$\pm 0,1$	965-201	963-101
ABP 200-5M	220	0,01	1	1	0,015	$\pm 0,1$	965-201	963-101
ABP 100-4M	120	0,1	1	10	0,1	$\pm 0,2$	965-201	963-101
ABP 200-4M	220	0,1	1	10	0,1	$\pm 0,2$	965-201	963-101
ABP 300-4M	320	0,1	1	10	0,15	$\pm 0,3$	965-201	963-101
Multi-division balance, with increasing or decreasing load, it switches automatically to the next largest or smallest weighing range [Max] and readout [d].								
ABP 100-5DM	52 120	0,01 0,1	1 1	1	0,02 0,1	$\pm 0,05 0,2$	965-201	963-101
ABP 200-5DM	102 220	0,01 0,1	1 1	1	0,05 0,1	$\pm 0,1 0,2$	965-201	963-101

Note: 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.



Discover more details and matching accessories online!

Version with automatic sliding doors and other innovative features

Features

- **1** Large glass draught shield: with 3 automatic sliding doors, which can be opened and closed using sensors, and integrated ioniser as standard. Thanks to the Memory Function, the balance stores how far the sliding doors have been opened. This prevents contamination and accelerates processes. Touching the sliding doors “gently” activates the push function and the doors open and shut automatically. Opening possible alternatively via button
- **2** Ioniser (included) can be activated at the touch of a button

- The adjustable internal draft shield minimises the effect of currents of air in the weighing space and guarantees maximum stability of the weight readings, only for 0.01 mg models of the series ABP-A
- **3** Erlenmeyer piston holder, included as standard with ABP 200-5M and ABP 200-5AM
- **4** Standard for models with [d] 0,01 mg: Multi-function weighing plate

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 \varnothing 91 mm, stainless steel
- Weighing space W×D×H 166×156×220 mm
- Overall dimensions W×D×H 220×370×350 mm
- Net weight approx. 8 kg
- Permissible ambient temperature 10 °C/30 °C

STANDARD



OPTION FACTORY



Model	Weighing capacity [Max]	Readability [d]	Verification value [e]	Minimal load [Min]	Reproducibility	Linearity	Options	
							Verification	Calibr. Certificate
KERN	g	mg	mg	mg	mg	mg	MI KERN	DAkKS accr. KERN

Note: 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.

ABP 100-5AM	135	0,01	1	1	0,05	± 0,1	965-201	963-101
ABP 200-5AM	220	0,01	1	1	0,015	± 0,1	965-201	963-101
ABP 200-4AM	220	0,1	1	10	0,1	± 0,2	965-201	963-101
ABP 300-4AM	320	0,1	1	10	0,15	± 0,3	965-201	963-101

Multi-division balance, with increasing or decreasing load, it switches automatically to the next largest or smallest weighing range [Max] and readout [d].

ABP 100-5DAM	52 120	0,01 0,1	1 1	1	0,02 0,1	± 0,05 0,2	965-201	963-101
ABP 200-5DAM	102 220	0,01 0,1	1 1	1	0,05 0,1	± 0,1 0,2	965-201	963-101



All details on DAkkS calibration certificates for test weights, our KERN calibration service and other useful information can be found here: www.kern-lab.com

OUR KERN SERVICE FOR YOUR DAILY LABORATORY LIFE

For quality assurance and easy, compliant sequences in the laboratory, KERN offers you an extensive range of services and plenty of suitable accessories – we will be happy to advise you.

Looking for the right test equipment?

You will find that we have an enormous range of test weights and suitable calibration services – all in accordance with the current DAkkS guidelines.

For example, discover our DAkkS-calibrated KERN Safety Sets each with an appropriate test weight for correct adjusting of the balance, a small test weight for checking the minimum sample weight, plus space for another separate test weight.

Extensive details on all topics see *Test Weights*.



KERN Safety Sets



KERN Clean room boxes

The benefit of KERN accessories: Count on it – everything fits together!

Our product advisors can recommend the fitting accessories for your KERN devices, so that your individual weighing systems seamlessly work together in a stable and reliable way.

Our accessories tips for all KERN Laboratory balances:



Ioniser to neutralise electrostatic charge, guarantees extremely rapid ionisation. Direct installation when ordering in combination with an ABP model, KERN ABP-A01, see *Analytical Balances*



Thermal printer, KERN YKH-01 other suitable printers, see *Accessories*

Solid weighing table

Professionalism and security for a stable weighing environment. Suitable for all laboratory balances, KERN YPS-03, see *Accessories*



→ Didn't find the right product in the catalogue?

You can find the full range of accessories and available KERN test equipment on the internet