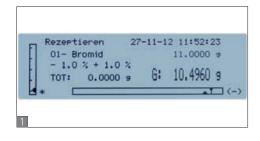
### Analytical balance KERN ALT-B









# Analytical balance with extensive recipe database

#### Features

- 11 Convenient recipe-weighing: with the recipe database, in which up to 99 recipes can be stored, each with up to 20 recipe ingredients with name and target value
- Rapid and efficient operation thanks to the graphics display
- · Simple plain text user guidance in the display in the following languages: D, GB, F, I, E, PT
- Automatic internal adjustment in the case of a change in temperature > 1,5 °C or time-controlled every 20 minutes
- Percentage determination: makes it possible to store a given weight value (100%) and to determine deviations from this target value
- · Weighing with tolerance range (checkweighing): Input of an upper/lower limit value. A visual signal assists with portion division, dispensing or grading

- Vibration-free weighing: at the push of a button, a stable average weight is given when the environmental conditions are
- · GLP/ISO record keeping of weight values with date, time and serial number
- Modern all glass draft wind shield for optimal visibility of the weighing object

#### Technical data

- · Large backlit LCDdisplay, digit height 15 mm
- Dimensions weighing surface Ø 80 mm
- · Dimensions housing WxDxH 210x340x330 mm
- Weighing space WxDxH 160x140x205 mm
- Net weight approx. 5,7 kg
- Permissible ambient temperature 5 °C / 35 °C

#### Accessories

- Protective working cover, KERN ALJ-A01
- loniser to neutralise electrostatic charge, see page 132, KERN YBI-01
- 2 Weighing table to absorb vibrations and oscillations, which would otherwise distort the weighing result, see page 132, KERN YPS-01
- Set for density determination of liquids and solids. Step-by-step user guidance, as well as the calculated density shown immediately on the display, KERN ALT-A02
- Suitable printers, see page 130

STANDARD













































Model	Weighing	Read-	Verific.	Minimum	Repro-	Linea-		Options			
	range	out	value	load	duci-	rity		Verification		DKD Calibr. Certificate	
	[Max]	[d]	[e]	[Min]	bility			MI		DKD	
KERN	g	mg	mg	mg	mg	mg		KERN		KERN	
ALT 160-4B	160	0,1	-	-	0,1	± 0,3		on request		963-101	
ALT 250-4B	250	0,1	-	-	0,1	± 0,3		on request		963-101	
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.

### **KERN Pictograms**



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



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



**Network interface:** For connecting the scale to an Ethernet network. With KERN products you can also use a universal RS-232/LAN converter.



**Net-total weighing:** weight of tare cup and weight of components memorized in two separate stores.



Weighing with tolerance range: Upper and lower limiting can be programmed individually, e.g. dosing/sorting and portioning.



**Stainless steel:** the balance is protected against corrosion.



Rechargeable battery pack: rechargeable set.



**Strain gauges:** Electrical resistor on an elastic deforming body.



Single cell technology: Advanced version of the force compensation principle with the highest level of precision.



Package shipment:

The time required to manufacture the product internally is shown in days in the pictogram.



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



Control outputs (optocoupler, digital I/O) to connect relays, signal lamps,



valves, etc.

GLP GLP/ISO record keeping: of weighing data with date, time and identification-no.
Only with printers from KERN.



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



Vibration-free weighing: (Animal weighing program) Vibrations are filtered out so that a stable weight is obtained.



**Suspended weighing:** load support with hook on the underside of the balance.



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



Tuning fork principle: A resonating body is electromagnetically excited, causing it to oscillate.



Verification possible: The time required for verification is specified in the pictogram.



Pallet shipment:

The time required to manufacture the product internally is shown in days in the pictogram.



**Memory:** Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU



**Interface for second balance:** for direct connection of a second balance



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



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.



Spray and dust protection IPxx:

The type of protection is shown by the pictogram. For details see the glossary.



Battery operation:

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



Power supply: integrated in balance. 230V/50Hz in Germany. More standards e. g. GB, AUS, USA on request.



**Electromagnetic force compensation:** Coil in a permanent magnet. For the most accurate weighings.



**DKD calibration possible:** The time required for DKD calibration is shown in days in the pictogram.



**Warranty:** The warranty period is shown in the pictogram.

### Precision is our business

To ensure the high level of precision of your balance, KERN offers the appropriate test weight package for your balance. This consists of the test weight, box and DKD calibration certificate, as proof of its accuracy. The best way to ensure proper balance calibration.

In the extensive KERN test weight range, you will find test weights in the international OIML error limit classes: E1, E2, F1, F2, M1, M2, and M3 with weights from 1 mg to 2000 kg.

The KERN DKD calibration laboratory for electronic balances and weights has been accredited by DKD since 1994 and today is one of the most modern and best-equipped DKD calibration laboratories for balances, test weights and force-measurement in Europe.

(DKD = German Calibration Service ~ UKAS)

## Your KERN specialist dealer:

Thanks to the high level of automation, we can carry out DKD calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

#### Range of services:

- DKD calibration of balances with a maximum load of up to 6000 kg
- DKD calibration of weights in the range of 1 mg 500 kg
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DKD calibration certificates in the following languages D, GB, F, I, E, NL, PL

Do you have questions about your scale, the corresponsing test weight or the calibration service? Your KERN specialist dealer will be pleased to assist you.

KERN - Professional measuring. Measuring technology and testing services from a single source









