MEDICAL SCALES 2022



Digital dynamometer KERN MAP





PROFESSIONAL CARE



Hand grip dynamometer, e.g. for rehabilitation treatment after accidents

Features

- Especially suitable for use in rehabilitation clinics for determining manual clamping force
- There are four measuring methods, for example, as part of a rehabilitation program, help the medical staff to monitor the strength of the patient's hands and carry out controlled training:
- Real time mode: immediately shows the client's current strength
- Peak/Max mode: shows the maximum strength of a client's grip
- Average mode: Calculates the average strength from two grips
- Counting mode: Counts the number of presses which exceed a previously defined strength limit
- An ideal device to determine reduced handstrength and a possible mortality risk of elderly persons as well as a malnutrition in case of chemotherapy or similar treatments.
- Safe, comfortable use thanks to non-slip rubber grips

- Integrated AUTO-OFF function after 1 minute to preserve the batteries
- Result displayed in kg or lb
- MAP 80K1S: Special version for children: The small handle depth allows children in particular to easily and ergonomically grip the handles
- MAP 130K1: Special version for body builders: Its design and extended measuring range mean that it offers additional capacity, which can accommodate the higher fundamental force exerted by body builders
- Exchangeable springs facilitate fast switching of the capacity (additional spring sets are included in delivery). The varying rigidity of the individual springs makes the hand grip dynamometer ideal for a wide variety of patient groups, e.g. children or senior citizens or in sports medicine
- Ill Stable case for safe, easy transport and for storage of the additional spring sets, standard, W×D×H 350×265×85 mm

Technical data

- LCD display, digit height 12 mm
- Batteries included, 1×CR2450,
- operating time up to 53 h
- Net weight approx. 0.3 kg



Model	Measuring range	Readability	Spring sets	Overall dimensions W×D×H	Option ISO Calibr. Certificate	
	[Max]	[d]			ISO	
KERN	kg	kg	kg	mm	KERN	
MAP 80K1S	80	0,1	10, 20, 40, 80	55×88×212	961-167	
MAP 80K1	80	0,1	20, 40, 80	55×102×212	961-167	
MAP 130K1	130	0,1	40, 80, 130	55×102×212	961-167	

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Pictograms



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

MEMORY

Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.



To connect the balance to a printer, PC or network

Data interface RS-232:



Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.



Statistics: using the saved values, the device calculates statistical data, such as average value, standard deviation etc.

PC Software: to transfer the measurements from the device to a PC



KCP

SOFTWARE

GLP/ISO log: With date and time. Only with KERN printers

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



Piece counting:

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



Totalising level A:

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



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TOL

Weighing units: Can be switched to e.g. nonmetric units.

Please refer to website for more details

Weighing with tolerance range:

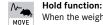
(Check weighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model



Hold function:

When patients do not stand, sit or lie completely still, a stable weight is calculated using an average weight

Your KERN specialist dealer



When the weighing conditions are unstable, a stable weight is calculated as an average



ZERO: Resets the display to "0"



Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013



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; B) EU, CH, GB, USA





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



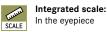
Weighing principle: Strain gauges Electrical resistor on an elastic deforming body



Peak hold function: capturing a peak value within a measuring process



Push and Pull: the measuring device can capture tension and compression forces



360° rotatable microscope head





MONO

Monocular Microscope: For the inspection with one eye



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BINO

Trinocular Microscope:

Binocular Microscope:

For the inspection with both eyes

For the inspection with both eyes and the additional option for the connection of a camera

Abbe Condenser:

With high numerical aperture for the concentration and the focusing of light



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ABBE

Halogen illumination: For pictures bright and rich in contrast

Ð LED

LED illumination:

Cold, energy-saving and especially long-life illumination



Fluorescence illumination for compound microscopes:

With 100W mercury lamp and filter



Fluorescence illumination for compound microscopes: With 3W LED illumination and filter

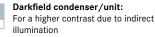


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POLAR

Phase contrast unit: For a higher contrast



To polarise the light

Polarising unit:



Infinity system: Infinity corrected optical system



Automatic temperature compesation: For measurements between 10 °C and 30 °C



Verification possible: The time required for verification is specified 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