



# Personal floor scale KERN MPN · MPN-L

Professional integratable personal scales for wireless transfer of weighing data to the EMR or EHR systems also for overweight patientes in the obese category









### Personal floor scale KERN MPN · MPN-L







### **Features**

- · Verification class III (verification is optional)
- Approved as a medical device according to 93/42/EEC
- Thanks to the integrated WiFi interface, this model is suited for wireless transfer of weights directly into the digital patient records, as soon as this is launched as a comprehensive service. By doing this, any documentation or transfer errors which occur during manual data transfer are eliminated. Thanks to this technology, this model can be integrated into existing or future EMR and EHR systems and ensures that your investment is future-proofed right now
- · KERN Universal Port (KUP): permits the connection of an external KUP interface adapter, such as, for example, RS 232, USB, Bluetooth or Ethernet, for the exchange of data and control commands, without any installation outlay
- · KERN MPN 300K-1LM: Version with [Max] = 300 kg and larger weighing plate. Specially suitable for weighing overweight patients who are in the obese category
- · Ideally suited for hospitals, clinics and doctors' surgeries
- · Robust design for daily use in a professional environment
- · Easy and hygienic cleaning
- · Secure and non-slip positioning with height-adjustable rubber feet

- II Level indicator to level the balance precisely
- · KERN MPN 300K-1LM: Sturdy handle for easy transportation of the scale
- 2 Flexible positioning of display device, e.g. free-standing or mounted to the wall. Wall mount for display device standard
- · Large platform with non-slip and wear-resistant surface made of plastic, to provide a secure footing for patients
- · Hold function: When patients do not stand completely still, a stable weight is calculated using an average weight and this is then "frozen". This means that you have sufficient time to attend to the patient first and then take the weight reading in peace
- Mother and child function: the parent's weight will be taken and then the scale will be reset to zero at the push of a button. Afterwards then the parent and baby can be weighed together. The weight of the child will now be shown on the display. This is particularly good for infants, as this way they can be cradled, safe and sound, in the arms of the parent while being weighed
- · BMI function to determine underweight/ normal weight/surplus weight
- High resolution readability: Readability [d] can be increased by one decimal place for 5 sec. by the touch of a key
- · Battery- or mains-powered, rechargeable battery operation optional
- · Protective working cover included with delivery

### Technical data

- Large LCD display, digit height 25 mm
- Weighing plate dimensions W×D×H MPN: 365×370×80 mm MPN-L: 400×500×120 mm
- Dimensions of display device W×D×H 210×54×100 mm
- Cable length of display device approx. 1,8 m
- Battery operation possible, 6×1.5 V AA not included, operating time up to 20 h
- · Mains adapter external, standard
- · Net weight approx. 12 kg

### Accessories

- Internal rechargeable battery pack, operating time up to 48 h, charging time approx. 8 h, KERN YMR-01
- · External data interface RS-232, Interface cable included, KERN YKUP-01
- · External data interface USB, Interface cable included, KERN YKUP-03
- External mains adapter, 100 240 V, 50 60 Hz, Standard EU, UK, KERN YKA-51
- · Bluetooth interface adapter, KERN YKUP-06
- Extension-Box, KERN YKUP-13
- · Memory module with real time clock (alibi memory), KERN YMM-03

# STANDARD























\* Within the EU, official verification is mandatory by law for scales that are intended for use as a medical device. Please add this to your order. We require the location of use and the post code for the verification.

Model	Weighing capacity	Readability	Verification value	Mandatory by law
				Verification
	[Max]	[d]	[e]	MIII
KERN	kg	kg	kg	KERN
MPN 200K-1M	250	0,1	0,1	965-129
MPN 300K-1LM	300	0,1	0,1	965-129





# Adjusting program CAL:

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



### Memory:

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



### Data interface RS-232:

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



### Bluetooth\* data interface:

To transfer data from the balance to a printer,  $\operatorname{PC}$  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.



### 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



### 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



### 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



### ZERO:

Resets the display to "0"



### Hold function:

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



### Hold function:

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 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



### Battery operation rechargeable

Prepared for a rechargeable battery operation



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



# Plug-in power supply:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available



# 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



### Integrated scale:

In the eyepiece



### 360° rotatable microscope head



### Monocular Microscope:

For the inspection with one eye



### Binocular Microscope:

For the inspection with both eyes



### Trinocular Microscope:

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



### Halogen illumination:

For pictures bright and rich in contrast



### LED illumination:

Cold, energy-saving and especially long-life illumination



# Fluorescence illumination

for compound microscopes: With 100 W mercury lamp and filter



### Fluorescence illumination for compound microscopes:

With 3W LED illumination and filter



### Phase contrast unit:

For a higher contrast



# Darkfield condenser/unit:

For a higher contrast due to indirect illumination



### Polarising unit:

To polarise the light



### 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

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