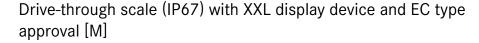
# KERN

#### Drive-through scale KERN NFB





### **Features**

- Drive-through scale for rapid weighing of e.g. wire cage trolleys, shelf trolleys, container trolleys, storage trolleys, sack trucks, transpallets, mobile containers, containers refuse etc.
- Low platform height and integrated access ramps on both sides facilitate access. No need for pit frame installation – which saves money
- Weighing bridge: out of anti-slip corrugated steel, 4 silicone-coated steel load cells, dust and spray protection IP67
- Display device: for details see KERN KFB-TM
- Protective working cover included with delivery
- Did you know? Our floor scales are delivered in a robust wooden box. This protects the high-quality weighing technology from environmental influences and stresses during transportation. KERN always one step ahead

# **Technical data**

- · Large backlit LCD display, digit height 52 mm
- Weighing plate dimensions
- W×D 1000×1000 mm (Without ramps)W×D 1200×1200 mm (Without ramps)
- Overall dimensions
- M×D×H 1600×1200×80 mm
- **B** W×D×H 1800×1400×80 mm
- · Platform height in the drive-through area: 80 mm
- Dimensions of display device W×D×H 250×160×58 mm
- Permissible ambient temperature -10 °C/40 °C

#### **Accessories**

- Protective working cover, scope of delivery 5 items, KERN KFB-A02S05
- Stand to elevate display device, Height of stand approx. 800 mm, KERN BFS-A07
- Pair of base plates to fix the weighing bridge to the floor, KERN BFS-A06
- Internal rechargeable battery pack, operating time up to 35 h without backlight, charging time approx. 10 h, must be ordered at purchase, KERN KFB-A01









- Bluetooth data interface for wireless data transfer to PC or tablets, must be ordered at purchase, not in combination with verification.
   When installing the Bluetooth data interface, the RS-232 data interface can no longer be used, KERN KFB-A03
- Analogue module, not possible in combination with signal lamp
   Analogue module 0–10 V, must be ordered at purchase, KERN KFB-A04
   Analogue module 4–20 mA, must be ordered at purchase, KERN KFB-A05
- In not possible in combination with analogue module, Signal lamp for visual support of weighing with tolerance range, KERN CFS-A03
- **I** Large display with superior display size, KERN YKD-A02
- Y-cable for parallel connection of two terminal devices to the RS-232 interface on the scale, e.g. signal lamp and printer, KERN CFS-A04
- Cable with special length 15 m, between display device and platform, for verified models which must be ordered at the time of purchase, KERN BFB-A03
- Further details, plenty of further accessories and suitable printers see Accessories

**Note:** For verified scales the weighing bridge must be fixed to the floor. Optionally, with an access ramp, a footplate pair or a pit frame

■ Shipment via freight forwarder. Please ask for dimensions, gross weight, shipping costs

STANDARD

STANDARD

OPTION

FACTORY

OPTION

FACTORY

ANALOG ACCU

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Model	Weighing	Readability =	Minimal	Cable length	Net weight	Weighing		Option	
	capacity	Verific. value	load	of display		plate	Verification	DAkkS Calibr. Certificate	
	[Max]	[d] = [e]	[Min]	device approx.	approx.		MIII	DAkkS	
KERN	kg	kg	kg	m	kg		KERN	KERN	
NFB 600K200M	600	0,2	4	5	140	A	965-230	963-130	
NFB 600K200LM	600	0,2	4	5	165	В	965-230	963-130	
NFB 1.5T0.5M	1500	0,5	10	5	140	A	965-230	963-130	
NFB 1.5T0.5LM	1500	0,5	10	5	155	В	965-230	963-130	

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.





#### Internal adjusting:

Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)



#### Adjusting program CAL:

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



#### **Easy Touch:**

Suitable for the connection, data transmission and control through PC or tablet.



## Memory:

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



#### Alibi memory:

Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.



#### **KERN Universal Port (KUP):**

allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WLAN, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort



#### 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



# USB data interface:

To connect the balance to a printer, PC or other peripherals



# Bluetooth\* data interface:

To transfer data from the balance to a printer, 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.



# Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements



# Interface for second balance:

For direct connection of a second balance



#### Network interface:

For connecting the scale to an Ethernet network



# 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



#### GLP/ISO log:

The balance displays weight, date and time, independent of a printer connection

and other digital systems



#### GLP/ISO log:

With weight, date and time. Only with KERN printers.



#### Piece counting:

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



#### -

Recipe level A: The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



#### Recipe level B:

Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display



#### Totalising level A:

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



# Percentage determination:

Determining the deviation in % from the target value (100 %)



# Weighing units:

Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details



# Weighing with tolerance range:

(Checkweighing) 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:

(Animal weighing program) 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.



#### 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, GB

B) EU, CH, GB, USA

C) EU, CH, GB, USA, AUS



#### Plug-in power supply:

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



#### Integrated power supply unit:

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



# Weighing principle: Strain gauges

Electrical resistor on an elastic deforming body



### Weighing principle: Tuning fork

A resonating body is electromagnetically excited, causing it to oscillate



# Weighing principle: Electromagnetic force compensation

Coil inside a permanent magnet. For the most accurate weighings



# Weighing principle: Single cell technology:

Advanced version of the force compensation principle with the highest level of precision



## Verification possible:

The time required for verification is specified in the pictogram



# DAkkS calibration possible (DKD):

The time required for DAkkS calibration is shown in days in the pictogram



# Factory calibration (ISO):

The time required for Factory calibration is shown in days 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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