# **BALANCES & TEST SERVICE 2023**

DISPLAY DEVICES/PLATFORMS/WEIGHING BRIDGES



### Platforms KERN KIP · KFP · KFD

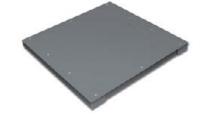


### KERN KIP-V20M

#### Weighing bridge



- Weighing bridge with non-slip chequer plate, lacquered, welded
- 4 Load cells, steel, silicone-coated, IP67, OIML-R60-approval for verification, class III, 3000 e
- Can be built in using pit frames (optional)
  Level indicator and levelling feet for
- precise levelling of the scaleEasy access to the junction box from the top
- Comfortable levelling of the weighing bridge from the top

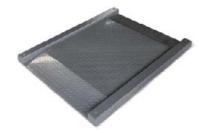


### KERN KFP-V20 IP67

#### Weighing bridge



- I Weighing plate screwed on from the top (models with [Max] ≤ 1500 kg), so it easy to remove, hygienic and easy to clean.
- Lacquered steel weighing bridge, weighing plate size 1500×1500×130 mm corrugated steel plate. Extremely resistant to bending due to material thickness
- 4 Load cells, steel, silicone-coated, IP67, OIML-R60-approval for verification, class III, 3000 e
- Can be built in using pit frames (optional)
- Level indicator and levelling feet for
- precise levelling of the scaleEasy access to the junction box
- from the top
- Comfortable levelling of the weighing bridge from the top



### **I KERN KFD-V20**

#### Weighing bridge



- Weighing bridge made of non-slip corrugated steel plate, lacquered, two access ramps integrated, extremely resistant to bending
- Extremely flat construction to facilitate access: access height only 45 mm
- 4 Load cells, alloy steel, silicone-coated, IP67, OIML-R60-approved class III, 3000 e



| Model                        | Weighing<br>range | Readability | Verification<br>value | Min.<br>Ioad | Cable length approx. | Net weight approx. | Weighing<br>plate |
|------------------------------|-------------------|-------------|-----------------------|--------------|----------------------|--------------------|-------------------|
|                              | [Max]             | [d]         | [e]                   | [Min]        |                      |                    | W×D×H             |
| KERN                         | kg                | g           | g                     | g            | m                    | kg                 | mm                |
| Weighing bridge KIP-V20M     |                   |             |                       |              |                      |                    |                   |
| KIP 600V20SM                 | 600               | 200         | 200                   | 4000         | 5                    | 130                | 1000×1000×108     |
| KIP 600V20M                  | 600               | 200         | 200                   | 4000         | 5                    | 150                | 1500×1200×108     |
| KIP 1500V20SM                | 1500              | 500         | 500                   | 10000        | 5                    | 130                | 1000×1000×108     |
| KIP 1500V20EM                | 1500              | 500         | 500                   | 10000        | 5                    | 140                | 1200×1000×108     |
| KIP 1500V20M                 | 1500              | 500         | 500                   | 10000        | 5                    | 150                | 1500×1200×108     |
| KIP 3000V20M                 | 3000              | 1000        | 1000                  | 20000        | 5                    | 150                | 1500×1200×108     |
| KIP 3000V20LM                | 3000              | 1000        | 1000                  | 20000        | 5                    | 180                | 1500×1500×108     |
| Weighing bridge KFP-V20 IP67 |                   |             |                       |              |                      |                    |                   |
| KFP 600V20SNM                | 600               | 200         | 200                   | 4000         | 5                    | 105                | 1000×1000×80      |
| KFP 600V20NM                 | 600               | 200         | 200                   | 4000         | 5                    | 135                | 1500×1250×80      |
| KFP 1500V20SNM               | 1500              | 500         | 500                   | 10000        | 5                    | 105                | 1000×1000×80      |
| KFP 1500V20NM                | 1500              | 500         | 500                   | 10000        | 5                    | 135                | 1500×1250×90      |
| KFP 3000V20NM                | 3000              | 1000        | 1000                  | 20000        | 5                    | 135                | 1500×1250×90      |
| KFP 3000V20LNM               | 3000              | 1000        | 1000                  | 20000        | 5                    | 155                | 1500×1500×80      |
| KFP 6000V20M                 | 6000              | 2000        | 2000                  | 40000        | 5                    | 210                | 1500x1500x130     |
| Weighing bridge KFD-V20      |                   |             |                       |              |                      |                    |                   |
| KFD 600V20M                  | 600               | 200         | 200                   | 4000         | 5                    | 125                | 1600×1200×78      |
| KFD 600V20LM                 | 600               | 200         | 200                   | 4000         | 5                    | 155                | 1800×1400×80      |
| KFD 1500V20M                 | 1500              | 500         | 500                   | 10000        | 5                    | 125                | 1600×1200×78      |
| KFD 1500V20LM                | 1500              | 500         | 500                   | 10000        | 5                    | 175                | 1800×1400×78      |

# **BALANCES & TEST SERVICE 2023**

KERN PICTOGRAMS





### 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.



• 888. •

RS 232

• 1998. •

RS 485

#### KERN Universal Port (KUP):

allows the connection of external KUP PCS 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



To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible

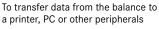
#### USB data interface:

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



USB

### Bluetooth\* data interface:





### WiFi data interface:

To transfer data from the balance to a printer, PC or other peripherals

**Control outputs** \_0^0\_ SWITCH

(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:

license. Other trademarks and trade names are those of their respective owner

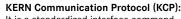
For direct connection of a second balance



KCP

#### Network interface: For connecting the scale to an

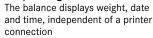
Ethernet network



It is a standardized interface command PROTOCOL 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







#### GLP/ISO log: GLP

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



PRINTER

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

### Recipe level A:

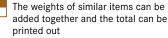
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out



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



**Totalising level A:** 



Determining the deviation in % from

Percentage determination:

the target value (100 %)

%

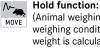
# B

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



KERN & SOHN GmbH · Ziegelei 1 · 72336 Balingen · Germany · Tel. +49 7433 9933-0 · www.kern-sohn.com · info@kern-sohn.com

\*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under

#### Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram.

Suspended weighing: Load support with hook on the UNDER

#### **Battery operation:**

underside of the balance

Ready for battery operation. The battery BATT 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. 230 V 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

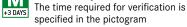


### Weighing principle: Single cell technology:

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



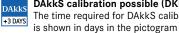
## Verification possible:



Factory calibration (ISO):

Package shipment:

Pallet shipment:



**ISO** 

1 DAY

2 DAYS

DAkkS calibration possible (DKD): The time required for DAkkS calibration

The time required for Factory calibration

The time required for internal shipping prepa-

The time required for internal shipping prepa-

rations is shown in days in the pictogram

rations is shown in days in the pictogram

is shown in days in the pictogram