

Display Devices KERN KFB-TM · KFS-TM



## 1 KERN KFB-TM

Display device with large digits – easy to read and optional analogue output for controlling systems (PLC) etc.

## 2 KERN KFS-TM

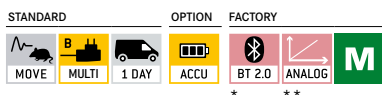
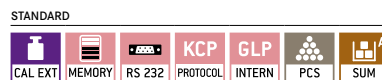
Professional indicator with 3 displays, also with EC type approval [M]

### Tip

- to see what options are offered by this display device, please see the KERN platform scale IFB on page 114

### Tip

- to see what options are offered by this display device, please see the KERN counting scale IFS on page 92



Features	Model KERN 1 KFB-TM	Model KERN 2 KFS-TM
Display (segments)	5 + ½ digits	6 digits
EC type approval	yes	yes
Resolution verifiable	6000 e	3000 e
Resolution non verifiable	30000 d	60000 d
Weighing capacities	≤ 2	≤ 2
Weighing units	kg, lb	kg, g
Readability	1, 2, 5, 10, n	1, 2, 5, 10, n
Piece counting with reference	10, 20, 50, 100, 200	n
Display, digit height	Backlit LCD display, 52 mm	Backlit LCD displays, 13/16,5 mm
Additional functions	Totalising, HOLD function, Integrated KERN Communication Protocol (KCP), ideal for connecting an Merchandise Management or ERP system, Compatible with the KERN EasyTouch App	99 item memories, totalising, printing of date and time, Integrated KERN Communication Protocol (KCP), ideal for connecting an Merchandise Management or ERP system, Compatible with the KERN EasyTouch App
Strain gauge load cells	87 - 1600 Ω	87 - 1600 Ω
Linearisation	3 points	4 points
Input voltage	12 V, 500 mA	12 V, 500 mA
Permissible ambient temperature	-10 °C/40 °C	0 °C/40 °C
Interface RS-232	yes	yes
2. Interface RS-232, separate Y cable	CFS-A04	CFS-A04
Interface RS-485	-	-
Interface USB	-	-
Interface Bluetooth	KERN KFB-A03	-
Analogue module	0-10V: KERN KFB-A04 4-20 mA: KERN KFB-A05	-
Signal lamp	CFS-A03	CFS-A03
Foot switch	-	-
Stand	BFS-A07	BFS-A07
Benchtop stand for display device/wall mount	yes/yes	yes/yes
Protective working cover	KFB-A02S05,	KFB-A02S05,
Rechargeable battery pack	KFB-A01,	KFB-A01,
Operating/charging time	up to 35 h/12 h	up to 40 h/12 h
Dimensions Housing W×D×H	250×160×65 mm	260×150×65 mm
Net weight	1,2 kg	1,5 kg

\* not possible in combination with verification. When installing the Bluetooth data interface, the RS-232 data interface can no longer be used

\*\* not possible in combination with signal lamp. When installing the analogue module, the RS-232 data interface can no longer be used

<p><b>Internal adjusting</b> Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)</p>	<p><b>Interface for second balance</b> For direct connection of a second balance</p>	<p><b>Hold function</b> (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value</p>	<p><b>Conformity Assessment</b> The time required for conformity assessment is specified in the pictogram</p>
<p><b>Adjusting program CAL</b> For quick setting up of the balance's accuracy. External adjusting weight required</p>	<p><b>Network interface</b> For connecting the scale to an Ethernet network</p>	<p><b>Protection against dust and water splashes IPxx</b> The type of protection is shown in the pictogram</p>	<p><b>DAkkS calibration possible (DKD)</b> The time required for DAkkS calibration is shown in days in the pictogram</p>
<p><b>EasyTouch</b> Suitable for the connection, data transmission and control through PC or tablet</p>	<p><b>KERN Communication Protocol (KCP)</b> 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</p>	<p><b>Suspended weighing</b> Load support with hook on the underside of the balance</p>	<p><b>Factory calibration (ISO)</b> The time required for Factory calibration is shown in days in the pictogram</p>
<p><b>Memory</b> Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.</p>	<p><b>GLP/ISO log intern</b> The balance displays weight, date and time, independent of a printer connection</p>	<p><b>Battery operation</b> Ready for battery operation. The battery type is specified for each device</p>	<p><b>Package shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
<p><b>Alibi memory</b> Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.</p>	<p><b>GLP/ISO log Printer</b> With weight, date and time. Only with KERN printers.</p>	<p><b>Rechargeable battery pack</b> Rechargeable set</p>	<p><b>Pallet shipment</b> The time required for internal shipping preparations is shown in days in the pictogram</p>
<p><b>KERN Universal Port (KUP)</b> allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WIFI, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort</p>	<p><b>Recipe level A</b> The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out</p>	<p><b>Universal plug-in power supply</b> with universal input and optional input socket adapters for A) EU, CH, GB B) EU, CH, GB, US C) EU, CH, GB, US, AUS</p>	
<p><b>RS-232 Data interface</b> To connect the balance to a printer, PC or network</p>	<p><b>Recipe level B</b> Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display</p>	<p><b>Plug-in power supply</b> 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available</p>	
<p><b>RS-485 Data interface</b> To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible</p>	<p><b>Totalising level A</b> The weights of similar items can be added together and the total can be printed out</p>	<p><b>Integrated power supply unit</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request</p>	
<p><b>USB Data interface</b> To connect the balance to a printer, PC or other peripherals</p>	<p><b>Percentage determination</b> Determining the deviation in % from the target value (100 %)</p>	<p><b>Weighing principle Strain gauges</b> Electrical resistor on an elastic deforming body</p>	
<p><b>Bluetooth* Data interface</b> To transfer data from the balance to a printer, PC or other peripherals</p>	<p><b>Weighing units</b> Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details</p>	<p><b>Weighing principle Tuning fork</b> A resonating body is electromagnetically excited, causing it to oscillate</p>	
<p><b>WIFI Data interface</b> To transfer data from the balance to a printer, PC or other peripherals</p>	<p><b>Weighing principle Single cell technology</b> Advanced version of the force compensation principle with the highest level of precision</p>		
<p><b>Control outputs</b> (optocoupler, digital I/O) To connect relays, signal lamps, valves, etc.</p>	<p><b>Weighing with tolerance range (Checkweighing)</b> 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</p>		
<p><b>Analogue interface</b> to connect a suitable peripheral device for analogue processing of the measurements</p>			

\* 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 license. Other trademarks and trade names are those of their respective owners.