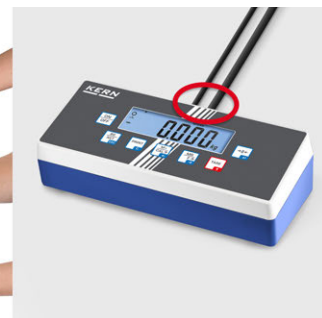## Display devices KERN KIB-TM

❸ KERN KIB-TM

Practical Flip/Flop display device for greatest ease of use

- Practical Flip/Flop display device: flexible positioning e.g. free-standing or screwed to the wall (optional). By rotating the upper housing shell you can determine the angle of the display as well as the cable outlet. Factory Option ex works for an additional cost, delivery time + 2 working days, KERN KIB-M01
- Industry 4.0: A large number of (optional) data interfaces enable convenient transferring weighing data to tablets, labtops, PCs, networks, smartphones, printers, etc.

- Searching and remote control of the balance using external control devices or computers with the KERN Communication Protocol (KCP). KCP is a standardised interface command structure for KERN balances and other instruments which allows you to recall and manage all relevant parameters and device functions. You can therefore simply connect KERN devices with KCP to computers, industrial control systems and other digital systems. In a large number of cases the KCP is compatible with the MT-SICS protocol. Only possible through RS-232 data interface, other interfaces on request.

In the KERN product range you will find a large number of platforms, weighbridges etc. which you can combine with the KERN KIB-TM display device. Simply select the components, KERN will take care of the rest.

* Verification not in combination with KERN KIB-A02, KIB-A03, KIB-A04, KIB-A10

** Note: In addition to the RS-232 data interface, which is integrated as standard, only one other data interface can be installed and operated

STANDARD

CAL EXT	ET	RS 232	KCP PROTOCOL	GLP PRINTER	PCS	SUM	PERCENT	TOL	MOVE	IP 65	MULTI	DMS	1 DAY

OPTION

ACCU

FACTORY

ALIBI	USB	BT 4.0	WIFI	SWITCH	LAN	M
	**	**	**	**	**	*

Features	Model KERN ❸ KIB-TM
Display (segments)	6 digits
EC type approval	yes
Resolution verifiable	6000 e
Resolution non verifiable	60000 d
Weighing capacities	≤ 2
Weighing units	kg, g
Readability	1, 2, 5, 10, n
Piece counting with reference	5, 10, 20, 25, 50, 100
Display, digit height	Backlit LCD display, 24 mm
Additional functions	Totalising, HOLD function, printing of time. KCP Only possible through RS-232; USB, Bluetooth, WiFi, Digital I/O, LAN on request
Strain gauge load cells	87–1100 Ω
Linearisation	3 points
Input voltage	12 V DC, 1000 mA
Permissible ambient temperature	–10 °C/40 °C
Interface RS-232	yes
Interface RS-485	–
Interface USB	KIB-A03**, see page 102
Interface Bluetooth	KIB-A04**, see page 102
WiFi	KIB-A10**, see page 102
SWITCH (DIGITAL I/O)	–
LAN	KIB-A02**, see page 102
Alibi memory	KIB-A01
Stand	EOC-A05, see page 102
Benchtop stand for display device/wall mount	EOC-A04
Protective working cover	EOC-A01S05
Rechargeable battery pack	KFB-A01, see page 102
Operating/charging time	up to 43 h/3 h
Dimensions Housing W×D×H	268×115×70 mm
Net weight	0,8 kg
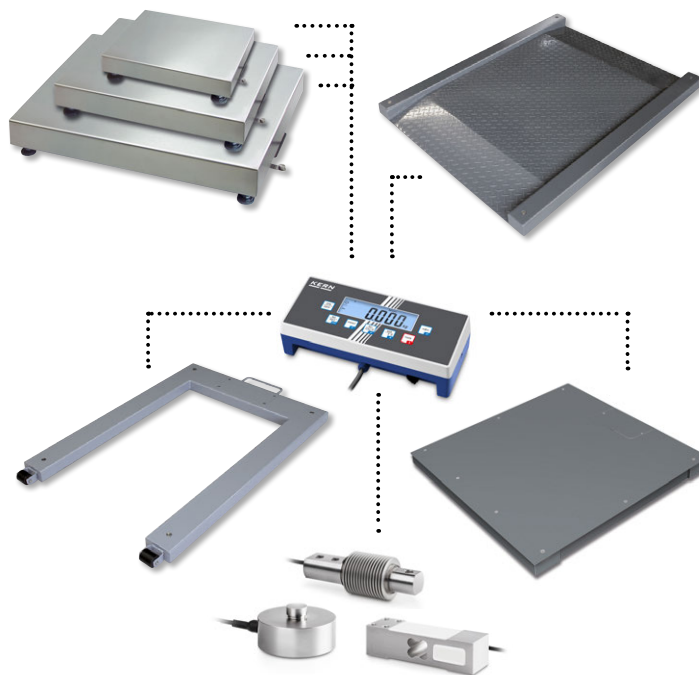
! **Tip**

to see what options are offered by this display device, please see the KERN platform scale IOC on page 102

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, tablet or smartphone.

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

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 and other digital systems

GLP/ISO log:
The balance displays serial number, user ID, weight, date and time, regardless of a printer connection

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 at the touch of a key. 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 mains adapter:
with universal input and optional input socket adapters for A) EU, CH, GB; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS

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

Power supply:
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

*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.

KERN – Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight in the international OIML error limit classes E1-M3 from 1 mg - 2500 kg.
In combination with a DAkkS calibration certificate the best pre-requisite for proper balance calibration.

The KERN DAkkS calibration laboratory today is one of the most modern and best-equipped DAkkS calibration laboratories for balances, test weights and force-measurement in Europe.
Thanks to the high level of automation, we can carry out DAkkS calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

Range of services:
· DAkkS calibration of balances with a maximum load of up to 50 t
· DAkkS calibration of weights in the range of 1 mg – 2500 kg
· Volume determination and measuring of magnetic susceptibility (magnetic characteristics) for test weights
· Database supported management of checking equipment and reminder service
· Calibration of force-measuring devices
· DAkkS calibration certificates in the following languages DE, EN, FR, IT, ES, NL, PL
· Conformity evaluation and reverification of balances and test weights

Your KERN specialist dealer: